

THE GEAR OF THETA TAU



Youngest Meets Oldest National Officer
Grand Outer Guard Carter Greeted by
Grand Scribe Schrader

SPRING 1947

Volume XXXVI

Number 2

The GEAR of
THETA TAU



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Theta Tau Fraternity

Founded at the University of Minnesota October 15, 1904

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ERICH J. SCHRADER
W. MURRAY LEWIS

ISAAC B. HANKS
ELWIN L. VINAL

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- R. W. NUSSER, Zeta '28 *Grand Regent*
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- N. B. AMES, Gamma Beta '17 *Grand Vice-Regent*
8 Westwood Drive, Washington 16, D. C.
- ERICH J. SCHRADER, Alpha '05 *Grand Scribe*
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307 Engineering Hall, University of Illinois, Urbana, Ill.
- PROF. DONALD D. CURTIS, Omicron Honorary '19 *Grand Marshal*
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- PROF. GEORGE W. CARTER *Grand Outer Guard*
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DELEGATE AT LARGE

- RUSSELL G. GLASS *Past Grand Regent*
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THE GEAR OF THETA TAU

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(Chapter house) 324 Walnut St., S. E., Minneapolis, Minn.
- BETA, *Established March 26, 1906* - Michigan College of Mining and Tech.
(Chapter house) 1405 College Ave., Houghton, Michigan
- GAMMA, *Established November 8, 1907* - - - Colorado School of Mines
c/o Prof. M. I. Signer, Colo. School of Mines, Golden, Colo.
- DELTA, *Established May 23, 1911* - - - - Case Institute of Technology
Theta Tau Box, Case Institute of Technology, Cleveland, Ohio
- EPSILON, *Established May 4, 1911* - - - - University of California
Theta Tau Box, Hearst Mining Bldg., Univ. of Calif., Berkeley, Calif.
- ZETA, *Established April 17, 1912* - - - - University of Kansas
(Chapter house) 1602 Louisiana Street, Lawrence, Kansas
- THETA, *Established May 26, 1914* - - - - Columbia University
c/o Prof. Nelson S. Fisk, Col. of Eng., Columbia University, New York City
- IOTA, *Established February 5, 1916* - - - - Missouri School of Mines
c/o Prof. J. B. Butler, Missouri School of Mines, Rolla, Mo.
- LAMBDA, *Established April 29, 1920* - - - - University of Utah
c/o George W. Carter, College of Engineering, Univ. of Utah, Salt Lake City
- MU, *Established January 3, 1922* - - - - University of Alabama
P. O. Box 2043, University, Alabama
- NU, *Established January 1, 1922* - - Carnegie Institute of Technology
P. O. Box 114, Carnegie Institute of Technology, Pittsburgh, Pa.
- Xi, *Established January 13, 1923* - - - - University of Wisconsin
c/o Prof. Keith Gilbert, Col. of Engineering, Univ. of Wis., Madison, Wis.
- OMICRON, *Established February 3, 1923* - - - State University of Iowa
c/o Prof. J. W. Howe, 210 Engineering Hall, Iowa City, Iowa
- Pi, *Established May 26, 1923* - - - - University of Virginia
c/o Professor Lawrence R. Quarles, College of Engineering, Univ. of Virginia
- RHO, *Established February 16, 1924* - N. C. State College of Ag. and Eng.
c/o Prof. T. C. Brown, M.E. Dept., N. C. State College, Raleigh, N. C.
- SIGMA, *Established November 29, 1924* - - - - Ohio State University
c/o Prof. Claude H. Wall, College of Engineering, Ohio State, Columbus, Ohio
- TAU, *Established December 12, 1925* - - - - Syracuse University
c/o Prof. D. E. Stearns, Col. of Applied Science, Syracuse Univ., Syracuse, N. Y.
- UPSILON, *Established April 7, 1928* - - - - University of Arkansas
(Chapter house) 213 N. Church St., Fayetteville, Arkansas
- PHI, *Established April 21, 1928* - - - - Purdue University
(Chapter house) 416 North Chauncey, West Lafayette, Indiana
- CHI, *Established April 23, 1930* - - - - University of Arizona
Theta Tau Box, Engineering Bldg., University of Arizona, Tucson, Ariz.
- PSI, *Established May 7, 1932* - - - - Montana School of Mines
Theta Tau Fraternity, Care of Montana School of Mines, Butte, Montana
- OMEGA, *Established March 26, 1932* - - - - S. Dakota School of Mines
(Chapter house) 107 Kansas City St., Rapid City, S. Dak.
- GAMMA BETA, *Established March 16, 1935* - George Washington University
c/o Prof. N. B. Ames, George Washington University, Washington, D. C.
- DELTA BETA, *Established May 20, 1939* - - - University of Louisville
(Chapter house) 2022 S. First St., Louisville, Ky.



Sixteenth Biennial Convention

Back row: Stevens, Glick, Watson, Buckman, Sparks, Mayer, Harmon, Ohlmann, Magnard, Northrup, Wall, Vineyard, Carter
Fifth row: Robinson, Hester, Steltner, Faircloth, Currey, Edwards, Schwartz, Beardon, Geissler, Hoagberg, Smith, Johnson, Higgins, Reinecke, Markwood
Fourth row: Barnes, Eggers, Salzer, Reardon, Lebre, Hughes, Harbomeier, Cornwall, Straka, Hansen, Bauer, Ryfun, Howe
Third row: Dingman, Louderback, Vawter, Mercer, Schrader, Nusser, Glass, Curtis, Daniels, Hinckley, Signer, Butler
Second row: Sall, Murphy, Slaton, Mangeno, Miller, Balfour, Deane, Rose, Surgeon, Hedgecock, VanBenthen
Front row: Wright, Hunt, Wantland, Mattei, Borgquist, Dalahanty, Smithson, Bradshaw, Steckler, Kimbrough, Ames

Sixteenth Biennial Convention Held at Louisville December 29=31, 1946

For the first time in five years Theta Tau held a National Convention and the excellence of the meeting in many respects compensated for the dearth of meetings during the war. Five years before, not long after that fateful Sunday when the unbelievable news from Pearl Harbor came tumbling out of the radio, a sober group of delegates had granted full power to the Executive Council to act for the good of the Fraternity until the next Convention and then turned their faces toward the war. The next few years saw some chapters ride out the storm with V-12 students and others disappear completely in the feminine wave that engulfed the colleges of the nation.

Now they were back. Clean-cut young men representing practically all of the chapters of the fraternity checked in at the Kentucky Hotel on the evening of December 28. Delta Beta men were on hand in strength and served well in making everyone welcome. For the first time, the chapter advisers were invited and many gray and bald heads mingled with the more fully equipped delegates. In all, sixteen chapter advisers attended. A smoker on the evening of the 28th provided an opportunity for all to get acquainted while the Credentials Committee worked over the incoming delegates.

The next morning the Convention opened with Robert Dalahanty, Delta Beta Regent, acting as temporary chairman for the purpose of receiving the members of the Executive Council. It was announced that the meeting

would be called the "John M. Daniels Convention" in honor of the long service of Past Grand Regent Daniels.



Newly Elected Grand Regent Nussur

The official list of delegates follows:

EXECUTIVE COUNCIL

Russell G. Glass, Sigma '24, Grand Regent
Ralph W. Nussur, Zeta '28, Grand Vice Regent
Erich J. Schrader, Alpha '05, Grand Scribe
Jamison Vawter, Zeta '16, Grand Treasurer
Donald D. Curtis, Omicron '19, (Hon.)
Grand Marshal
Paul L. Mercer, Omicron '21, Grand Inner
Guard
A. Dexter Hinckley, Theta '27, Grand Outer
Guard

DELEGATE AT LARGE

John M. Daniels, Hon. No, Past Grand Regent
PAST GRAND REGENTS
H. H. Hopkins, Beta '08
George D. Louderback, Epsilon '96

CHAPTER DELEGATES

Alpha: Roland R. Hoagberg, '47
Beta: William Edwards, '48

THE GEAR OF THETA TAU

Gamma:	William R. Smith, '48
Delta:	John Salzer, '47
Epsilon:	Frank M. Hansen, '47
Zeta:	Francis W. Van Bentham, '48
Theta:	W. H. Glick, '48
Iota:	George J. Miller, '47
Lambda:	Robert C. Mayer, '48
Mu:	Wm. M. Murphy, Jr., '47
Nu:	Robert C. Straka, Jr., '47
Pi:	W. F. Markwood, Jr., '47
Rho:	Vernon M. Barnes, Jr., '48
Sigma:	George W. Sall, '49
Tau:	John C. Ryfun, '47
Upsilon:	Robert L. Hester, Jr., '47
Phi:	Harry R. Schwartz, '47
Chi:	Wm. L. Sparks, '47
Psi:	Harold W. Johnson, '47
Omega:	Michael A. Higgins, '48
Gamma Beta:	Felix D. Geissler, '49
Delta Beta:	Neil S. Balfour, '48

ALTERNATES

Beta:	William B. Cary, '48
Mu:	Ross B. Robinson, '48
Phi:	Robert Ditto, Delta Beta, '48
Upsilon:	Raymond H. Hedgecock, '48
Tau:	David Bauer, '48
Delta Beta:	John T. Bearden, '47

ALUMNI ASSOCIATIONS

S.W.A.A.	E. S. Borgquist, Lambda, '11
T.C.A.A.	Henry T. C. Eggers, Hon., Alpha

Chicago A.A.	H. H. Hopkins, Beta '08
Kansas City A. A.	R. W. Nusser, Zeta '28
Central, O. A.A.	C. H. Wall, Sigma '20
I.A.A.	George W. Carter, Lambda, '33
Cleveland A. A.	Leslie J. Reardon, Delta, '27
National Capitol	Norman B. Ames, Gamma Beta, '17
Montana A.A.	O. A. Dingman, Zeta, '14

CHAPTER ADVISERS

Alpha:	Henry T. C. Eggers, Hon., Alpha
Gamma:	M. I. Signer, Iota, '22
Delta:	Leslie Reardon, Delta, '27
Epsilon:	George D. Louderback, Epsilon, '96
Zeta:	G. W. Bradshaw, Hon., Zeta
Iota:	Joe B. Butler, Hon., Iota
Lambda:	George W. Carter, Lambda, '33
Mu:	J. M. Faircloth, Rho, '28
Nu:	J. M. Daniels, Hon., Nu
Omicron:	J. W. Howe, Omicron, '24
Sigma:	C. H. Wall, Sigma, '20
Upsilon:	Wm. B. Stelzner, Upsilon, '07
Chi:	E. S. Borgquist, Lambda, '11
Psi:	O. A. Dingman, Zeta, '14
Gamma Beta:	Norman B. Ames, Gamma Beta, '17
Delta Beta:	N. G. Northrup, Hon., Delta Beta



Executive Council

Back row: Mercer, Hinckley, Nusser, Daniels
 Front row: Vawter, Schrader, Glass, Curtis

Immediate attention was given to the appointment of committees, nineteen groups being named, and no delegate omitted. The actives thus had an early indication of the great amount of work which is accomplished by these Conventions.

Also announced was an attractive agenda for the chapter advisers, three

the status of returning actives were indicated as essentials in the next biennium.

Acting Grand Regent Hopkins then took the floor and described the operation of the fraternity during the war years. This most interesting report is contained in the Convention minutes and is of historic value. The fraterni-



Chapter Advisers

Back row: Howe, Daniels, Bradshaw, Faircloth, Eggers, Ames, Louderback, Hopkins
Front row: Wall, Dingman, Reardon, Borgquist, Signer, Butler, Carter

meetings being scheduled, each packed with topics of commanding interest.

The Credentials Committee report by Grand Marshal Curtis revealed two "perfect" delegates, four "excellent," eleven "satisfactory," and five "poor." Considering the lapse in chapter activity throughout the fraternity, this was a creditable showing.

Reports by the Grand officers followed. Grand Regent Glass acknowledged the fine service of Acting Grand Regent Hopkins who took over the reigns when the Navy accepted Brother Glass' offer of service in 1943. The war made it impossible for the Grand Regent to carry out many of his plans but nevertheless several accomplishments could be listed. A chapter officers' manual in process, a proposal for restoration of XI Chapter at Wisconsin, and the invitation of the Chapter Advisers to the National Convention were mentioned. Need for visitation, restoration of the National Objectives plan, and clarification of

ty was divided into geographic regions each under the immediate supervision of a national officer. Travel restrictions curtailed visits or Executive Council meetings although two of the latter were held in Chicago. The GEAR was published without interruption and did not suffer great financial loss. The cooperation of chapter advisers and the unprecedented efforts of the council members kept the spark alive in practically every chapter through this difficult period.

The Grand Vice Regent's report by Brother Nusser dealt largely with his post-war efforts to regenerate chapters hard hit by the conflict. During the war his duties prevented his traveling but he devoted considerable time to the preparation of a chapter officers' manual.

Founder Erich Schrader read the report of the Grand Scribe which revealed that the membership in the fraternity lacked but one man of being 10,000 when he closed his books

for the Convention. (The initiation of a Delta Beta Brother the following evening made the round number a reality.) The report contained much good advice for the delegates and few will forget Brother Schrader's comments on the use of nicknames on formal roll books or records. Of considerable significance were his closing words: "We are pioneers in our field and we have had to solve many problems by trial and error. The policies established have proven their merit and we have had a harmonious organization, the members of which have taken pride and pleasure in their common brotherhood. Let us do nothing to destroy what has been built up! The college fraternity is not a public institution, it exercises no political functions, it is not an economic institution. It is a private brotherhood which chooses its membership the way a family admits guests to its home, on its own terms, and it should do nothing to admit the vagaries of the moment or the alien fanaticisms which already have had such a disastrous effect on many formerly worthy American institutions. We ask our members to sign a Pledge Form which sets forth the Laws and Customs of Theta Tau which we have found successful and worthy of our acceptance. If these do not suit the prospective member he is free to join others whose policies please him better."

Grand Treasurer Vawter gave his usual thorough accounting for fraternity funds showing that the National treasury had weathered the war without damage. The entire period since the last Convention was presented for approval.

At the conclusion of the morning

meeting memorial services for members whose death had been reported since the last Convention were held and the Grand Scribe was instructed to list their names in the official Convention minutes.

The afternoon session opened with the report of Grand Marshal Curtis who outlined the functions of his office and stressed the need for chapter cooperation to insure accurate records and prompt service. More than 1600 shingles were mailed during the war years despite the inactivity of many chapters.

Grand Inner Guard Mercer reviewed his work on the Erich J. Schrader Award and told of the value of this competition to the fraternity. His chapter visitations and Executive Council meetings were enumerated.

Reports from the National Officers were completed with that of Grand Outer Guard Hinckley who mentioned his chapter visits during the war years.

The GEAR Editors reviewed circulation and cost figures for the war period and indicated that costs were likely to increase sharply in the coming biennium. Gratifying to all was the news that the Life Subscription Fund was more than twice as large at the present time than had been anticipated in making the original estimates.

Chapter reports filled the remainder of the first day's business. Running through practically all of them were optimistic accounts of chapter interest and growth. Apparently the G. I.'s were finding a professional engineering fraternity much to their liking. Alumni Associations reports were also heard, many of these being verbal, but all showing a renewal of interest in fraternity functions.

Committee work occupied the dele-

gates more or less completely the first evening and reports based upon the night's work filled the next day. High points were the recommendations by the Committee on Extension that the Xi Chapter charter be given to the local Gamma Mu Epsilon fraternity at Wisconsin; by the Publications Committee that the chapters spend the biennium locating their alumni so that a directory might be published two years later; by the Regional Meetings Committee that plans for the resumption of Regional meetings be formulated; by the Scholarship Committee that a \$500 scholarship be awarded to an outstanding Theta Tau in the coming biennium; and by the Committee on Chapter Officer's Manual that the present writing of the Manual be mimeographed and sent to the chapters. Debate at times waxed warm and vigorous but apparent throughout was a true democratic atmosphere in which all opinions were heard and respected and majority rule was accepted without question by the minority.

While these activities were in process on the Convention floor the Chapter advisers were in session in another room. This session was reported to have been extremely beneficial and stimulating.

Without doubt the high point of the Convention was the initiation of Joseph Carter Reynolds of Delta Beta Chapter. Neil Balfour, member of Delta Beta, led a team of delegates in as fine a presentation of the ritual as any present had ever witnessed. Brother Balfour delivered the major portion from memory and with convincing sincerity and at the climax called upon founder Erich Schrader to give the grip to Brother Reynolds.

Thus he who originated the grip gave it to the ten-thousandth member forty-two years later in a manner that none present will ever forget.

The Convention banquet followed and under the able guidance of Brother Frank Smithson, Delta Beta '41, as toastmaster, the National Officers gave short talks which were of much interest to all present. Included among the speakers was Brother George Louderback, a Past Grand Regent, who gave convincing testimony to the advantages of membership in the Fraternity.

The last day of the Convention began with the announcement that Brother William Sparks of Chi had been chosen as the outstanding delegate by his brothers from other chapters. There followed a report by the Auditing Committee, recommendation for an Advisers' Manual from the Chapters Advisers' meeting, reports from the Resolutions Committee and from the Constitution Committee. Finally the report of the Nominations Committee was accepted with the result that the following officers were elected for the coming biennium.

Grand Regent, Ralph W. Nusser, Zeta '28

Grand Vice Regent, Norman B. Ames, Gamma Beta, Hon.

Grand Scribe, Erich J. Schrader, Alpha '05

Grand Treasurer, Jamison Vawter, Zeta '16

Grand Marshal, Donald D. Curtis, Omicron Hon.

Grand Inner Guard, A. Dexter Hinckley, Theta '27

Grand Outer Guard, George W. Carter, Lambda '33

The new officers were installed and the Convention closed in proper form.

All delegates left the meeting with admiration for the beautiful handling of arrangements by Delta Beta Chap-

ter, a renewed respect for the National Officers, and an intensified loyalty to their fraternity.

Impressions of the Convention

W. Lafayette, Indiana
March 15, 1946

Dear Brother Howe:

I considered it a great honor and privilege to represent Phi Chapter at the National Convention.

It was really a pleasure to work with such a grand group of fellows. Never before have I seen so much accomplished in such a short time as I did at the National Convention. Talking with gentlemen like Brothers Schrader, Glass, Nusser, Vawter, and Hopkins was very inspiring.

As for the outside activities, Saturday evening John Bearden, Delta Beta Chapter, gave three of us fellows from Phi the telephone numbers of some Zeta Tau Alphas. The girls showed us a grand time. Sunday night three Chi Omegas from Louisville University showed us the city. Monday night I enjoyed the stag party made up of a large group of delegates and fellows from Delta Beta. Glick's (Theta Chapter) songs were the highlight of that evening.

Yours in H & T,
H. R. SCHWARTZ, Phi '47

March 13, 1947

Dear Brothers Mercer and Howe:

I certainly enjoyed the trip to Louisville to the Convention. The trip up and back was pretty rough, rain up and snow all the way back, but otherwise, we had the best time possible.

I can say for myself that Theta Tau never meant so much to me as it did after I saw the Executive Council in operation and met all the delegates from other chapters. I realized that Theta Tau was the best organization an engineer could belong to and am very glad I was invited to join.

I was surprised to meet Brother Glick, Theta, who worked in the same department at General Electric Co. in Philadelphia as I did before I went to school. It was good to talk to some one again from good ole "Dept. 69." I was glad to see Brother Daniels again and I really appreciate all the help he has given our chapter.

I really learned a lot about how a fraternity should be functioning and how to get around

many problems which have been giving us trouble.

Yours in H & T,
WILLIAM M. MURPHY, Mu

March 11, 1947

Dear Brother Howe:

The fraternal fellowship among the delegates, chapter advisers, and the Grand officers was the thing that impressed me most at the Convention. The Fraternity is now a living thing to me. The phrases used in the Ritual are certainly more than mere words.

As for side lights on "extra curricular" activities, I cannot aid much on that score. Most of the time of the delegates was taken up by meetings, committee meetings, etc.

In closing I might add that the Convention and the meeting of the Grand Officers was very inspiring to me. I hope that I shall be able to attend future conventions. Delta Beta Chapter should be complimented for handling the arrangements of a very successful affair.

Yours in H & T,
FRANK M. HANSEN, Epsilon

800 Olive Street
Rolla, Missouri
February 3, 1947

Dear Brother Howe:

My impressions of the Convention could all be summed up in the one word *inspiration*. I deem it one of the outstanding honors of my life that I was chosen to attend the Sixteenth Biennial Convention. It was a truly inspiring and wonderful experience for me—one I shall never forget.

Since returning to school I have been trying to convey to the chapter the wealth of ideas that I brought from Louisville. I feel like becoming almost fanatical in my efforts to help the chapter progress, for everything I saw at Louisville strengthened my desire to be of service to Theta Tau and to see it grow. The way that fellows from all over the country could easily get together and conduct the important business of the Fraternity was nothing short of amazing. The good fellowship exhibited by the Grand Officers, delegates and chapter advisers was a real tribute

to the Fraternity. As soon as I stepped into the company of Theta Taus all my diffidence disappeared—I knew I “belonged”. How proud I was of that fact!

The Grand Officers are to be congratulated on the fine job they did in steering the Convention through its important transactions with so little confusion.

Not the least of my inspiration was gained from Brother Schrader. His sustained interest in the fraternity, his constant efforts at the Convention to be of help to all of us, and the part he took in the initiation brought to mind more forcibly what a marvelous thing it is to be a Theta Tau.

I wish there were time to keep in close personal contact with each person I met at the Convention, for in each I seemed to have found a true friend. I am eager to see the names and addresses of all the Convention delegates published, for I know I shall find a great deal of pleasure in corresponding with as many as I find possible.

We owe a great deal to “Jeep” Deane, Bob Delahanty and the other men of Delta Beta chapter for the fine job they did in arranging for the Convention and in keeping us entertained during our stay in Louisville. I didn’t get to see as much of the town as I should have liked, but I had the outstanding experience of seeing the “Musicians’ Club”—what a dive! There was another place we went to out on the edge of town someplace—the only thing I remember about that trip was passing a beautiful distillery on the way out and getting kicked out of the back room. Higgins will remember.

Our program committee has started to work in putting some of the Convention ideas into action. We feel that Iota will benefit a great deal from this Convention and that we shall have something concrete to offer to the next Convention. We particularly like the idea of exchanging ideas with other chapters and are looking forward to a rich and beneficial correspondence along those lines.

Yours in H & T,

GEORGE J. MILLER, Iota '47

January 6, 1947

Dear Brother Howe:

I’m afraid I have looked only at the serious side of our Sixteenth Biennial Convention in presenting my impressions of that meeting. It was a serious meeting, and I feel that it should be treated as such.

These days most conventions present an excuse for the delegates to get out of their hometown and raise a little hell in the convention city; however, such was not the nature of our Sixteenth Biennial Convention. It was soon made apparent that our national

officers had a lot of work on their program and wanted it done right. Reports from the various chapters and the appointed committees took up the greater percentage of our time, but there was also time for much intelligent debate. We forced some decision on all issues placed before our assembly. Our work was cut out for us, and we did it to the best of our ability. No one showed any intention of “sluffing” his part.

We can never thank our grand officers enough. The tremendous amount of work which they put into our fraternity affairs is difficult to realize. And their only reward is the satisfaction of a job well done. We have a splendid fraternity because of their efforts in our behalf.

I was most impressed by the manner in which our delegates from all sectors of these United States were so strongly bonded together through their fraternal relationships. Representatives of twenty-two chapters cannot and should not think alike, but it was easy to discern that these delegates had a basic core which was similar in all. They were Theta Tau men—brother—and each would have taken any of the other members into his home and would have been proud to call him a brother in Theta Tau.

In H & T,

HAROLD N. JOHNSON, Psi

January 6, 1947

Dear Brother Howe:

The opportunity to attend the National Convention of Theta Tau was one of the most pleasant and profitable experiences of my life. The courtesy of the Host Chapter was unbounded.

To begin with, we were met on arriving by Brothers Dalahanty and Taylor of Delta Beta and taken in their private auto to the Kentucky Hotel. This started us out with good feeling. I enjoyed especially meeting the grand officers who have been represented for 17 years simply by a list of names in the GEAR. The only grand officers I was acquainted with were Brother Schrader and Brother Glass.

The group of Chapter advisers is about the finest bunch of fellows a man could meet anywhere. All were courteous and pleasant and certainly interested in working for the best interests of Theta Tau.

It was pleasing to see the delegates jump in and work on their several committees, and to hear their reports and recommendations discussed on the floor. They were a keen bunch of boys and I am sure the chapters of the Fraternity will be safe in the hands of such a fine group.

All in all it was a wonderful opportunity

for me to attend the Convention and I want to thank the grand officers most heartily for making it possible for the chapter advisers to attend.

Yours in H & T,

E. S. BORQUEST

Chapter Adviser for Chi

March 16, 1947

Dear Brother Howe:

To give my comments upon the Convention, as you requested in your letter, would be to speak almost completely in the superlative. Most important to Lambda Chapter are convention-conceived ideas which I carried back with me which have provided the Chapter with subject matter for a full schedule for this and the coming year. We have already embarked upon our Professional Leadership and Development program, having meetings every other week at which some of the foremost men in their fields are guest speakers. These meetings are open to the whole campus, and attendance has been excellent.

I wish to thank the Delta Beta Chapter members for making our stay in Louisville so pleasant. Again at the Convention I realized what a fine fraternity Theta Tau is, and how outstanding its members both as engineers and as men. The spirit of brotherhood was something not easily forgotten and again made me feel how fortunate I was to be a member of such a fine professional fraternity.

Yours in H & T,

ROBERT C. MAYER,

Lambda Delegate

3416 Ashby Road
Shaker Heights, Ohio
March 17, 1947

Dear Brother Howe:

I think the Convention expressed very aptly the solid balance, admirable harmony, and generous compromise which exists between the more experienced, more conservative, and more sacrificing alumni and the younger, faster, and easier undergraduates. This relation between the two groups gives our fraternity that stable foundation, that strange unity and that warm brotherliness without which there would be no Theta Tau. This Convention was one of my greatest experiences in life.

However, I still have a kick about the election of the most outstanding delegate. The balloting was held after the group pictures had been shown to everyone and these pictures were propagandizingly suggestive—

any fool could see that Bill Sparks *stood out most*.

Certainly some credit should also be given to the delegate from Utah (gee, I can't recall his name and do not have the list on hand). Yes, Sir, his charming young wife arrived the second day (Cleveland girl she is, too). A bunch of us had a drink with them, but even so we could not see how the husband could find it more urgent to play poker all night leaving her to her knitting. Seemingly it was business before pleasure. Or, just as for some life begins at forty, for others night begins at two forty.

Anyhow, I did not understand it because I was missing my wife who has to stay home due to her advanced stage of biological condition. May I reveal that she did not do so in vain, for on Valentine's Day I became the father of a 6½ lb. girl. In proof of which I am enclosing a birth announcement for your use.

Yours in H & T,

JOHN M. SALZER,

Delta Chapter

Dear Brothers:

I appreciate this opportunity to express my impressions of the Convention held in Louisville.

It was with great pride that I listened to the opening of the Convention as each delegate proudly presented his chapter's activities and accomplishments of individuals. I, too, was honored not only by representing a fine group of men, of Tau, but also, by my associations with the excellent group of delegates at the Convention.

It is true that the elimination of the racial discrimination clause was not voted favorably at this convention. However, the interest and concern of each and every delegate as expressed to David Bauer and me, was deeply appreciated.

I am sure that the many things that we learned at the Convention have shown its effects on our conduct of Tau Chapter activities. The initiation ceremony, especially, which was so well executed has had a marked improvement on our ceremonies.

With continued interest of each chapter in the affairs of others as shown at the Convention, Theta Tau should always increase in prestige and scope.

Yours in H & T,

JOHN C. RYFUN

Convention Chatter

The Editors are admittedly growing older having been at the helm for the past eighteen years. Accordingly they must be forgiven if they were unable to keep abreast of the nocturnal activities of the delegates with quite their former avidity. To add to the handicap one of them brought his wife!

On this note it might be observed that Delta Beta provided entertainment for ladies—the first such invitation to be given to a Convention—and took those who attended on a memorable tour of local landmarks which was thoroughly enjoyable. Ye Editors seized upon the opportunity to present a picture of some lovely ladies to the Gear readers but the "ceiling zero" weather was too much for the f 7.3 lens on the old prewar camera! Only shadowy forms could be detected on the negative. (Our order for a new camera is still on file.)

Brother Sparks and Borgquist of Chi Chapter felt that the Kentucky folks outdid themselves on hospitality as they watched Arizona beat Louisville 64 to 63 on the night before the Convention! Sparks hardly had enough voice left the following night to pass his credentials examination.

Accents were more uniform than at any previous convention in our memory. Even the delegates from the deep South were putting r's into their conversation in almost midwestern style and the Easterners were leaving them out of words that don't have them. Probably the war had an influence which was reflected in this way. Brother Johnson of Psi insisted that

Butte should not be called But-ty.

We really were convinced that the present-day student is more serious than we were at that age when a delegate protested that the Theta Tau Sweetheart song was not typical—being a love song. However, the conviction died promptly when the beautiful female photographer showed up and the boys flocked around in large numbers to "help." As Brother Mayer of Lambda remarked, "The photographer can have all the assistants she wants."

If anyone could be accused of "eager beaver-ing" it would be "Jeep" Deane, chairman of local arrangements. He was popping in and out like a hot electron and kept everything moving like clockwork. It's behavior like his that gave rise to the expression, "Southern Hospitality."

It must not be supposed that the delegates did not uncover practically all the night spots in Louisville. However, we believe that there was less nightclubbing at this meeting than at any other convention.

The presence of the Faculty Advisers added much to the Convention. Although they had their own sessions a good share of the time, they were frequently on the Convention floor and their presence lent an air of importance to the occasion that resulted in an extremely business-like meeting. These men, to whom national meetings of various kinds are no novelty, merit the gratitude of the fraternity for their generous contribution of time and effort.

One of the interesting pre-convention episodes was the publication in early December in several papers around the nation of a picture of the Kentucky Hotel with a fire ladder reaching to an eighth story window out of which a lady was being escorted. Those who saw the picture were quick to notice whether their room assignment fell within reach of

the Fire Department's equipment. Most of the Executive Council were on the 15th and 16th floors and would have had to jump the first half of the way down in case of a bad fire.

We noticed the State Republican Headquarters across the street from the hotel. Probably Louisville was as far into Kentucky as a good Republican dared go!

Xi Chapter Reactivated At Wisconsin

A petition received at the Sixteenth Biennial Convention from Gamma Mu Epsilon, a local engineering fraternity

Briggs of Phi Chapter conducted an initiation for seventeen men at the Lorraine Hotel.



Back row: Mickleson, Schindlehorst, Pike, Enlow, Sethne, Jagmin, Borchers, Geshay, Bakken

Middle row: Rohlich, Bowman, Jefferies, Black, Scott, Gilbert, Stickney, Vinnetti, Hambley, Courson, Everett

Seated: Turnbull, Daniels, Vawter, Nusser, Hopkins, Biggs, Duntley

at Wisconsin University, was favorably considered and as a result a group of National officers arrived in Madison on March 22, 1947, to reactivate Xi Chapter which had been inactive since 1928. Grand Regent Nusser, Past Grand Regents Daniels and Hopkins, and Grand Treasurer Vawter assisted by Brothers John Duntley, Alpha '49, W. C. Turnbull, Beta '44, and R. M.

The following brothers were initiated:

Norman J. Stickney, Met. '48
William A. Hambley, Met. '49
John N. Pike, Met. '48
William H. Courson, Elec. '48
Alfred B. Scott, Min. '48
David A. Mickelson, Met. '49
Harold J. Enlow, Chem '49
Alex R. Mitka, Chem. '50

James B. Geshay, Met. '48
Keith E. Gilbert, Faculty
Roland D. Black, Met. '49
Edward H. Jagmin, Min. '50
Buford R. Everett, Elec. '48
Walter C. Borchers, Chem. '49
Robert O. Shindelholz, Civ. '49
Norman C. Sethne, Mech. '49
Joseph R. Vinette, Min. '50

Following the initiation the group adjourned to the Crystal Room for a banquet. After the excellent food was disposed of, Brother John Pike took charge and introduced Grand Regent Nusser who read the numerous congratulatory messages which arrived from the active chapters, alumni associations, and Executive Council members and went on to deliver a forceful address.

All Council members were introduced and made brief addresses. Grand Treasurer Vawter gave excellent instructions on the function of chapter officers and presented the new chapter with the brass candle sticks which

were used at the Sixteenth Convention. Past Grand Regent Daniels spoke on the meaning of membership in a professional fraternity and Brother Frank Bowman, Xi '25, and Gerard Rohlich, Nu Hon., of the Wisconsin faculty indicated their interest in the new chapter.

The Grand Regent next called a formal meeting of Xi chapter and proceeded to the election of officers, the results of which were as follows: Regent, Buford R. Everett; Vice Regent, Harold J. Enlow; Scribe, David A. Mickelson; Treasurer, William H. Courson; Corresponding Secretary, John N. Pike. The newly elected officers conducted a short business meeting which was formally closed by Regent Everett.

The following morning the new officers met with the representatives of the Executive Council for final instructions and advice and the new chapter assumed its place as one of the twenty-four in the Fraternity.

Thomas M. Linville Receives Coffin Award

Thomas M. Linville, Pi '26, recently received the Charles A. Coffin Award from the General Electric Company for his contribution to "the development of direct current machines and effective application to the design of propulsion machines for submarines in World War II." The Coffin Award is given for the encouragement of outstanding contributions by employees of General Electric for efficiency in the company or for progress in the electrical art.

A Naval Reserve officer during the war, he performed special service for

the Navy in both Atlantic and Pacific theatres, while concentrating principally on the production of special G. E. equipment for war. He joined General Electric in 1927 and has been associated with various departments specializing in direct current engineering, marine and aeronautics engineering, and motor and generator engineering.

March 1 he joined the staff of the manager of engineering, Apparatus Department, in the General Electric Office at Schenectady, New York.

George W. Carter New Grand Outer Guard

George W. Carter, Lambda '33, the newly-elected Grand Outer Guard of Theta Tau, is a rather earnest, quiet, bespectacled man, well-liked by his students and fellow-professors at the University of Utah where he is Associate Professor of Mechanical Engi-



George W. Carter

neering. It is common knowledge at the University that Brother Carter kept Lambda Chapter going during the student-less war years when he was also very active in the war training program.

Born in Salt Lake City, Brother Carter attended the Salt Lake schools and received his B.S. degree in Mechanical Engineering in 1933. While a member of the student body, he was Regent of Lambda Chapter. In addition to his Theta Tau interests, he was also a member of Tau Beta Pi. In 1934 he received his M.S. degree in heat-power engineering.

Following receipt of his M.S., Brother Carter worked in Denver as a design engineer for the U. S. Bureau of Reclamation and the P.W.A. At present, he is Vice President and Chief Engineer of Coal Logs Company, Incorporated, a newly formed organization concerned with a process for the carbonization of coal. Recently he served as Chairman of A.S.M.E., Utah Section.

The author of several articles on the carbonization of coal, the newly elected Grand Outer Guard is a frequent speaker for A.S.M.E., the American Chemical Society and A.I.C.E. He is a member of Sigma Xi and an honorary member of Sigma Nu. Also, it is Brother Carter who is responsible for the Professional and Leadership Development committee of Theta Tau and his work in the carbonization of coal has proven him outstanding in the industrial development of Utah.

"Daddy," said Junior, "today at school a boy told me I look just like you."

"And what did you say?" the father inquired proudly.

"Nothing. He was bigger than me."

Just let a wife say to an average husband: "You were so handsome to-night, dear. I was proud of you." Then watch his face light up with noble, unselfish joy because he has given pleasure to others.

An Engineer's Observations In London

WM. J. ELLENBERGER,
Gamma Beta '30

The author was formerly a Signal Corps Officer whose war service was largely in the field of military lend-lease. He was in London on D-Day and later served as Assistant Executive, U. S. Staff, London Munitions Assignment Board. Lt. Colonel Ellenberger received the M. B.E. from the British as well as our Army Commendation Ribbon.

An American visiting London for the first time immediately compares his surroundings with cities at home. He must keep in mind that history has been in the making almost two thousand years in Britain but only a few hundred in America. A corollary is the Englishman's traditional resistance to change, simultaneously, an advantage and a disadvantage but certainly a dominant factor in his spirit. The following observations were made by an engineer in military service who examined some phases of British engineering practice, made comparisons with its American counterpart and delved into British engineering history.

London has been growing since the beginning of the Christian Era. Part of the wall surrounding the Roman military encampment named Londinium is still extant. In the heart of London known as "the city" place names, Aldgate, Bishopsgate, etc. indicate the location of the ancient exit gates. The Tower of London, built by the Normans as protection against native uprising has successively served as fortress, palace and political prison. The primitive state of architecture at the time of its construction is evident from the walls, out of square by eleven feet at the base where they are twenty-

one feet thick. Despite this, the material (stone imported from Normandy) and workmanship is of such enduring quality that the structure ap-



Lt. Col. W. J. Ellenberger

pears good for another thousand years.

City growth was rapid after the Great Fire in 1666. Despite the calamity it gave opportunity to rebuild on a grand plan. Christopher Wren's scheme, the masterly conception of a highly skilled mind, provided wide streets for ready access and free flow of traffic together with easily developed building sites. Unfortunately failure of property owners and public authorities to cooperate resulted in reconstruction on the ancient street lines. Despite this, Wren created a new London through his architectural expression in the many public

buildings he designed. St. Paul's Cathedral, the dome of which is considered his masterpiece, is still the dominant feature of London's architecture. It was thirty-five years in the building and fortunately survived the "blitz". From an engineering standpoint, this more than any other of his fifty-two churches excites our interest in the magnitude of the plan and the excellence of the construction achieved without benefit of modern machinery and construction methods. Appropriately the Architect was buried in the crypt with this inscription "Si monumentum requiris circumspice" (if you seek a monument, look around).

Westminster Abbey and Westminster Hall date (in part) from the eleventh century. Let us here pay tribute to Hugh Herland, master carpenter to Richard II for Westminster Hall's hammerbeam roof, one of the most notable examples of carpentry in the world, a more significant accomplishment in its day than Parliament Building now overshadowing it.

Today, Greater London encompasses an area of 700 square miles radiating fifteen miles from Charing Cross in all directions. Modern London has swallowed its former satellite communities accounting for the intermixture of residential, commercial and industrial areas.

The impact of city growth on real estate values both before and since the introduction of urban mass transportation has led to subdivision of property to provide additional lots for residential building and for other purposes. Such devices as the "court" and "mews" provide street access, many a stately mansion standing today masked by more recent buildings. In

Belgravia I have seen row houses in the rear of a block of flats access to which is gained by passage through the public halls of the flats. City and suburban property is more commonly fenced than in the United States, the enclosures being brick walls or iron fences due to the shortage of lumber. Grounds of considerable extent are enclosed reflecting the strong British sense of property ownership: the "man's house is his castle" principle.

The average British dwelling house occupant takes delight in the garden about his home where he enjoys diversion in pottering with his flowers, shrubbery or fruit trees. Those not so fortunately situated have recourse to the public parks. Hyde Park, Regent's Park, and the others always popular are filled to overflowing on bright days.

In the matter of street paving, wood blocks laid on a concrete base with tar filled joints are still widely used having first been tried in 1838. This surface offers a degree of resiliency against the pounding of heavy traffic. There are still in service many heavy horse drawn wagons without pneumatic tires. At street intersections the woodblock paving is sometimes modified by the insertion at regular intervals of roughened iron blocks providing a non-skid surface. Sidewalk paving of stone slabs laid on a bed of sand is common practice over sidewalk vaults used for storage of fuel (coke or coal). In the upper class urban home, the basement is occupied by the kitchen and servants who "live in".

It was sometime before I realized the absence of our conventional type of water hydrant. In lieu of this there is the sidewalk housing a wrench oper- an iron box or hand hole flush with

ated valve and pipe elbow threaded to take either a fire engine suction hose or adapter for small hose. The static water reservoirs, pipe lines, emergency pumping stations and use of the ponds in the parks as water supplies were a part of the A.R.P. in which some interesting hydraulic engineering problems were solved.

Street and highway lighting by gas is still general although electric lighting is growing in use on main thoroughfares and mercury vapor or sodium lamps have been installed on some arterial highways. During the black-out years such lighting development was static.

The London Bridge of nursery rhyme fame was a succession of wooden structures dating from the Roman occupation. It may be presumed the earliest one was similar to

caisson method. The present replacement was built in 1862. Of the twelve bridges now spanning the Thames in the central London area, one other deserves recognition as it was the work of John Rennie the greatest English bridge builder of his day. He was commissioned in 1809 to connect the Strand with the Surrey side of the river, his design providing for nine semi-elliptical arches of 120 feet span. Upon its completion in 1817, it was renamed Waterloo Bridge in honor of Wellington's victory. In 1934 it was torn down and replaced by the present reinforced concrete and stone structure which fortunately escaped the blitz. Several emergency bridges were constructed as an air raid precaution. Fortunately war damage to the bridge was slight.

Several tunnels beneath the Thames



Emergency Bridge Over the Thames

the Rhine bridge described in Caesar's Commentaries. A medieval stone bridge built by the monks was completed in 1209. Westminster Bridge two miles upstream was built by Labeledy, a Swiss engineer in 1750. It was of stone having the distinction of being the first bridge in which the piers were constructed by the open

serve as traffic arteries in addition to the bridges. The earliest completed in 1843 would probably have been abandoned but for the persistence of Marc I. Brunel, the Engineer who carried it through to completion.

The following comments on building construction cover a variety of structures built over a considerable

span of years. Brick and stone are widely used reflecting again the timber shortage. In older railway engineering works such as viaducts, bridges and retaining walls, the use of brick is almost universal. These were built in a period of cheap labor, relatively cheap material and little available construction machinery. Large modern buildings of steel and concrete with ornamental stone facing correspond to American practice. Examples are Thames House and the Shell Mex Building.

Large blocks of modern flats are of fireproof construction. Some housing projects have outside fire escapes of the masonry stairwell type similar to the interior fireproof stairwells in our apartment houses. I was surprised, however, to note open stairs and elevator shafts in relatively modern buildings, no deterrent to the spread of a conflagration.

Central heating is a luxury found only in modern expensive flats, office buildings and hotels. The skyline is dotted with chimney pots at times belching forth smoke to combine with atmospheric conditions producing the famous or infamous London fogs. Incomplete combustion of soft coal is in a large measure cause of the dingy appearance of buildings and deterioration of stonework. Electric space heating with portable "electric fires" is popular in view of the mild climate.

Plumbing in general is not up to our standard. It is probable that when wartime deferred repairs are made they will include modernization. In older buildings, plumbing pipes have been installed on exterior walls resulting in frost damage during infrequent severe weather. We could well initiate one British practice in buildings having

circulating domestic hot water. Such installations have bathrooms and lavatories fitted with nickel plated brass towel racks through which the hot water circulates. This device keeps towels dry as well as providing some space heating.

Much has been written of the British Grid of high tension transmission lines interconnecting the principal load centers and power generating stations. The history of electric utility development in Britain closely parallels that in the United States. Many small undertakings were consolidated to effect economics in generation and distribution. While there are areas in which direct current is still used, 50 cycle alternating current predominates, this being the standard frequency rather than our 60 cycles.

Steel tower overhead transmission lines look much the same as ours but underground transmission cables, steel wire armored for direct earth burial, are widely used, conduit lines being built only where circumstances preclude direct burial. British public utility engineers justify their practice on the grounds of greater heat dissipation from cables in direct contact with the earth, permitting higher load ratings and on the infrequency of cable failures. Electrical engineers will be interested to know that when these cables are to be spliced, a precast concrete box with slotted ends known as a "coffin" is placed in the bottom of the excavated trench. The cable is spliced centering the joint in the "coffin" which is then filled with pitch and the excavation backfilled.

Primary and secondary distribution cables are installed in underground conduit and distribution transformers

are located in street manholes. Some secondary cable is, however, trenched beneath sidewalk slabs. I do not recall seeing any overhead electric distribution lines in the city area. Utilization voltage is of the order of 240 volts or double our standard. Much wiring has been installed in old buildings using lead covered duplex wire without metallic raceway. Wiring devices, fittings and electrical hardware are not standardized to the degree found here, consequently it is often inconvenient to move appliances because of non-matching plugs and receptacles. Three-terminal plugs and receptacles are used in certain current ratings for protective grounding of appliances. Lamp sockets and lamp bases are of the Edi-Swan type.

London would never have grown to its present size had it not developed an effective mass transportation system, one able to overcome restrictions imposed by lack of adequate planning in the past. Recall Wren's city plan that failed for lack of civic vision. The present tram car, bus, trolley bus and underground lines, formerly independent enterprises, were unified some years ago under the London Passenger Transport Board providing excellent low cost service. The Board's comprehensive plan of development initiated in 1931 had to be shelved for the duration of the war. In the all-out war effort shops were converted to manufacture aircraft and other munitions.

Public transportation started in July 1829 with George Shillibeer's omnibus running from Paddington Green to the Bank of England. Horse drawn buses continued in service until 1911. The tram car lines (originally cable cars, hence the underground

trolley system) were not extended into the congested part of the city where narrow winding streets prevail. The motor bus first seen on London streets in 1900 forced retirement of the horse. In the U. S. modern electrically propelled urban transport vehicles are the street car and the trolley bus. Street conditions already referred to limit the former but there is a fleet of about 1,800 trolley buses. Almost 9,000 surface line vehicles are in use distributed 70% buses, 20% trolley buses and 10% tram cars. All three types are double decked conforming to the riding habit demanding maximum seating of passengers. Buses are oil engine propelled, of the two or three axle type, seating 56 or 60 passengers, respectively. Fares are based on the distance traveled rather than on our popular universal fare, hence a ride may cost three half-pence or a shilling (3c or 20c).

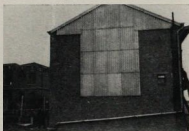
A trolley bus feature worth noting is the 48 cell, 60 volt nickel-cadmium storage battery, normally operated as two 30 volt batteries in parallel for lighting; the 60 volt source may be applied to the 95 horsepower traction motor for emergency propulsion. This permits maneuvering in garage or shop area with trolley down, bypassing a stalled bus or other traffic interruption. Ability to avoid bomb craters or debris along the right-of-way was an important factor in maintaining wartime transportation.

The L.P.T.B. buses constitute the largest fleet in the world of a given type of equipment operated by a single management under a fixed maintenance policy. Production line maintenance methods follow of necessity. In the overhaul shops reminiscent of Detroit or other automotive centers

equipment is disassembled, cleaned, gauged, worn or damaged parts repaired or replaced, sub-assemblies made up and reassembled in such fashion that an old vehicle emerges ready for many more miles of service. The economics of this policy might be questioned in America but Britain in wartime had no production capacity devoted to replacement parts, hence miracles were performed in building up worn or damaged parts by metal spraying, plating or welding.

The "underground" is worthy of separate consideration covering as it does a vast area with comfortable quiet running high speed multiple unit car trains. Power supply is at 600 volts direct current through a third rail system from substations housing synchronous converters, motor-generators or mercury arc power rectifiers. Substations are usually fed by two 11 KV, 3 phase 33 1/3 cycle high tension feeders. Contrast this frequency with our 25 cycles. Bulk power supply is from three generating stations or by purchase from utilities serving the metropolitan area. Almost half a million kilowatts of conversion equipment in 168 manual, automatic or remote operated substations supply the L.P.T.B. surface and underground lines. Some of the stations visited were almost identical in arrangement and appearance to ours. Continuity of service as a matter of public safety being of paramount importance in underground railway operation trolley feeders are sectionalized at frequent intervals. Station and tunnel lighting for each station is supplied from two sources. Likewise, escalators are operated from separate 600 volt D.C. feeders direct from the substation rather than from trolley feeders. When

riding on the underground I often noted two bare copper wires supported on insulators a few inches apart along the side of the tunnel. Upon inquiring I learned this was a safety feature whereby the motorman of a stalled train could de-energize the third rail by bridging the two wires. This action would close the feeder circuit breaker trip circuit after which he could clip a portable telephone to the wires and talk to the substation operator. In discussing wartime operating experiences with substation engineers,



Surrey Docks Substation

I learned they maintained stocks of reserve equipment and repair parts at strategic points. One station practically demolished by a buzz bomb was restored to service in six weeks. Experience gained during the war leads these men to say there is no peace-time operating emergency they are afraid to face.

Having written at some length on urban transportation, reference should be made to British railways. It is unnecessary to dwell on the obvious relation between steam power, the industrial revolution and railway development. To any engineer interested in technological history it is a distinct privilege to visit the Science Museum at South Kensington. Here are preserved for posterity such historic loco-

motives as Hedley's "Puffing Billy" and Stephenson's "Rocket". Harold Clunn tells us in "The Face of London" that: "Notwithstanding the success of the earlier railways laid down in the north of England, London was slow to adopt the new method of transit, and it was not until 1836 that the first line was opened between London and Greenwich". A long period intervened between this beginning and the recent consolidations into four great railway systems radiating from a dozen stations in various sections of London. The sprawling network of tracks crossing and re-crossing the city without apparent plan and the multiplicity of railway stations was a blessing in disguise during the "blitz" when destruction of a large part of the terminal facilities would have paralyzed the city. Despite heavy bombing, service was never completely disrupted.

A paper by the Chief Mechanical Engineer of the Southern Railway, read before the institution of Mechanical Engineers a little over a year ago gives insight to modern steam locomotive design. The type described is the "Merchant Navy" class designed within loading gauge and weight limitations to haul 550-600 ton passenger trains at 70 miles per hour or express goods trains under conditions approaching passenger train service. These locomotives exert a tractive effort of 37,500 pounds, have an ad-

hesive weight of 63 tons and a total weight (locomotive and tender) of 145 tons. Boiler pressure is 280 pounds per square inch, steam being fed to three cylinders of 18 inch bore by 24 inch stroke. Wheel arrangement is 4-6-2 corresponding to our Pacific type with 6 foot 2 inch drivers. Contrast this locomotive with those described in the latest A.S.M.E. Progress Report on Railway Mechanical Engineering taking into consideration the difference in weight and capacity of British and American rolling stock.

Main line railway electrification has been practiced in England almost exclusively by the Southern Railway. This railway serves a large commuting area south of London in Surrey, through traffic with the south coast port cities and to the west. Electric operation is restricted to trains of the multiple unit car type furnishing high speed passenger service. There is pending a \$75,000,000 expansion program planned to greatly increase the scope of electric operations.

In the limitless scope of engineering only a few phases may be discussed in an article of this type. Choice had, of necessity, to be those fields striking the author's fancy. It is hoped that one or more of the subjects touched upon will stimulate the readers to further interest in comparing engineering practice here and abroad.

The Builders

by DR. VANNEVAR BUSH

(Reprinted from *The Technology Review*)

The process by which the boundaries of knowledge are advanced, and the structure of organized science is built,

is a complex process indeed. It corresponds fairly well with the exploitation of a difficult quarry for its build-

ing materials and the fitting of these into an edifice; but there are very significant differences. First, the material itself is exceedingly varied, hidden and overlaid with relatively worthless rubble, and the process of uncovering new facts and relationships has some of the attributes of prospecting and exploration rather than of mining or quarrying. Second, the whole effort is highly unorganized. There are no direct orders from architect or quarrymaster. Individuals and small bands proceed about their businesses unimpeded and uncontrolled, digging where they will, working over their material, and tucking it into place in the edifice.

Finally, the edifice itself has a remarkable property, for its form is predestined by the laws of logic and the nature of human reasoning. It is almost as though it had once existed, and its building blocks had then been scattered, hidden, and buried, each with its unique form retained so that it would fit only in its own peculiar position, and with the concomitant limitation that the blocks cannot be found or recognized until the building of the structure has progressed to the point where their position and form reveals itself to the discerning eye of the talented worker in the quarry. Parts of the edifice are being used while construction proceeds, by reason of the applications of science, but other parts are merely admired for their beauty and symmetry, and their possible utility is not in question.

On the other hand there are those men of rare vision, who can grasp well in advance just the block that is needed for rapid advance on a section of the edifice to be possible, who can tell by some subtle sense where it will

be found, and who have an uncanny skill in cleaning away dross and bringing it surely into the light. These are the master workmen. For each of them can well be many of lesser stature who chip and delve, industriously, but with little grasp of what it is all about, and who nevertheless make the great steps possible.

There are those who can give the structure meaning, who can trace its evolution from early times, and describe the glories that are to be, in ways that inspire those who work and those who enjoy. They bring the inspiration that all is not mere building of monotonous walls, and that there is architecture even though the architect is not seen to guide and order.

There are those who labor to make the utility of the structure real, to cause it to give shelter to the multitude, that they may be better protected, and that they may derive health and well-being because of its presence.

And the edifice is not built by the quarrymen and the masons alone. There are those who bring them food during their labors, and cooling drink when the days are warm, who sing to them, and place flowers on the little walls that have grown with the years.

There are also the old men, whose days of vigorous building are done, whose eyes are too dim to see the details of the arch or the needed form of the arch or the needed form of its keystone; but who have built a wall here and there, and lived long in the edifice, who have learned to love it and who have even grasped a suggestion of its ultimate meaning; and who sit in the shade and encourage the young men.

Former Gear Editor Decorated

Lt. Col. Albert W. Morse, Jr., Alpha '29, has been decorated with the Order of the Crown of Italy for his part in so directing the bombing of Rome in 1944 that only military installations and railroads were touched and civilian population and church property were spared. Col. Morse was the only non-Italian present at a luncheon to which

the dignitaries of the church and Italian officers were invited and he was presented with a gold medal bearing a facsimile of the pipe presented to him by a prince of the church in Italy. Col. Morse was a former editor of the GEAR.

Minnesota Alumnus

Ed McGlone Advanced

One of the youngest high executives in the metal mining industry is Edward S. McGlone, Gamma '23, who was appointed vice president in charge of Western operation for Anaconda Copper Mining Co. He received his M.S. degree from the Colorado School of Mines, where his athletic achievements on football and baseball fields established a lasting reputation in those sports. He has been with Anaconda since 1924, working his way from miner and sampler to shift boss, foreman, and other executive posts to general manager of Western mining and metallurgical operations in 1945. He served in the U. S. Army in the first World War and is popular throughout Montana.

Engineering & Mining Journal



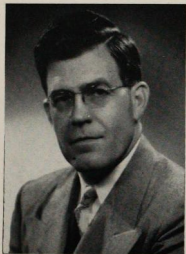
Col. Edward H. Coe Awarded the Legion of Merit

Col. Edward H. Coe, Alpha '19, of 2627 S. Grant Street, Arlington, Virginia, recently received the Legion of Merit "for exceptionally meritorious service in Europe from November, 1943, to July, 1945. He directed the construction of large military camps and other important projects in England, the repair and maintenance of road systems vital to operations in

Normandy and the rehabilitation of many hundreds of miles of railroads in France, Belgium, Luxembourg, and Germany." Col. Coe also holds the Bronze Star. At present he is chief of the supply division and acting director of military supply and procurement, Office of the Chief of Engineers, Washington, D. C.

Dean A. McGee Directs Growing Company

Teachers and fellow students of Dean A. McGee, Zeta '26, predicted a successful career for him—and he's having it. He is executive head of a



fast growing oil company in Oklahoma City with an amazing collection of subsidiaries and affiliates to manage.

After a year as instructor in the School of Engineering, Brother McGee joined the Phillips Petroleum Co. at Bartlesville, as a petroleum geologist

and carried on with Phillips for 10 years. He was chief geologist during his last two years. In February, 1937, he joined the Kerlyn Oil Co. of Oklahoma City as vice president in charge of production and exploration. This company had been formed by Robt. S. Kerr, Governor of Oklahoma, and Robert H. Lynn. In 1942 McGee became executive vice president of the company. In January, 1946, Mr. Lynn left to carry on operations in Texas and the name was changed to the Kerr-McGee Oil Industries, Inc.

A whole bevy of activities has clustered around Brother McGee so that he is now president and director of Fen-Ter Refining Co., president and director of Franklin County Gas Co., vice president and director of Kerr-McGee Building Corp., and director of the Associated Refineries, Inc. In addition, he holds the office of vice president and director of the West-Central Broadcasting Co. and of the Kerr-McGee Skyways, Inc. On the side he is a director of the Liberty National Bank of Oklahoma City and holds membership in some 20 technical, professional and honorary organizations.

The Graduate Magazine

Earl L. Bastian Writes For Industry

In an authoritative article recently published in the "American Machinist," Earl L. Bastian, Delta '31, presents a newly perfected technique for the improvement of shop control of oil concentrations used in metal cutting and grinding. In 1936, Brother Bastian entered the employ of Shell Oil

Co. as a service engineer. Progressing through various positions with Shell, Bastian became an authority on cutting fluids and emulsions used in precision metal working. At present he is head office staff engineer in New York City. He is a member of the American Society of Mechanical Engi-

neers, the American Society for Metals, the American Society of Tool Engi-

neers and the National Wire Association.

Case Alumnus

Emil Kindsvater Department Head at Phillips

Management of the newly-formed chemical engineering department of Phillips Petroleum Co., Bartlesville, Oklahoma, is under the direction of Emil Kindsvater, Zeta '23. Brother Kindsvater has been with Phillips since 1929 when he resigned as an instructor in civil engineering at Kansas University.

The establishment of the new department was announced January 5. It has 112 technical employees who have attended 71 universities and hold degrees from 51 universities. In all, the department has 235 employees. Their work includes the evaluation of processes and equipment; design, construction and maintenance of pilot plants in Oklahoma and Texas; operation of pilot plants for chemical engineering data; use of large-scale equipment and the making of tests and applications for the manufacturing departments as well as in licensing and patenting activities. Phillips Co. officers consider the new department as

one of its four "watchdogs of the company's progress."



Brother Kindsvater and his family live at 1341 Keeler Avenue, Bartlesville.

Kansas Alumnus

Robert J. Edwards Leaves For Private Industry

Robert J. Edwards, Delta '25, Cleveland division engineer for the State Highway Department, resigned his position last November for a post in private industry. He is now with the National Engineering & Contracting Co. of Cleveland. Appointed by Governor Lausche, Brother Edwards maintained jurisdiction over hundreds of miles of state highways in Cuya-

hoga, Lake and Geauga counties. Previous to his appointment he was associate director of the Cleveland Regional Geodetic Survey. During his term in office, he speeded construction plans on important highways serving the Greater Cleveland area and was particularly helpful in pushing the city's freeway building program.

Case Alumnus

Lloyd F. Christianson Heads Electronic Associates

Lloyd F. Christianson, Zeta '35, adds his name to the list of K. U. alumni presidents as head of Electronic



Associates, Inc. The company is relatively new, now in its second year, with its main field of endeavor centered around research and development.

Electronic Associates was formed during the war from a nucleus of former experts serving in the new Equipment Introductory Detachment in the office of the Chief Signal officer. Their work was to supplement the work of scientists and engineers to produce effective results on the battle fields; now they apply their knowledge and experience directly to peacetime electronic problems.

Lloyd, who was formerly a chemical engineer with the U. S. Bureau of Mines, his wife, Sergie Dannenberg Christianson, and their young son live at 639 Norwood Avenue, Long Beach, New Jersey.

The Graduate Magazine

F. M. Rich Makes Steel For Kaiser

Francis M. Rich, Kappa '25, assumed his new duties last summer as vice president in charge of operations at the Kaiser steel plant, Fontana, California. His outstanding work in the field was recognized in 1935 when he received the J. E. Johnson, Jr. award from the American Society of Mining and Metallurgical Engineers for his efforts in blast furnace developments and improved production methods.

Brother Rich started his career at the South works of the Illinois Steel Co. (now Carnegie-Illinois Steel Corporation) after he received his degree in mechanical engineering. From the Illinois Steel company, where he

learned the trade as a stove tender and blower, Mr. Rich advanced rapidly, in 1929 joining the Wisconsin Steel Co. as assistant to the open hearth superintendent. He later moved to the Youngstown Sheet and Tube Co. in Ohio, then on to Republic Steel, where he served as superintendent of blast furnaces of Republic's Buffalo district until 1938. At that time he accepted the position of assistant to the vice president and works manager of Steel Co. of Canada, Ltd., in 1943 was made assistant works manager of the Hamilton, Ontario, works of the company, an office he held until his present appointment with Kaiser.

Illinois Alumni News

Professor Quarles Named Acting Dean

Lawrence R. Quarles, Pi '29, has been named acting dean of the Department of Engineering at the University of Virginia by President J. L. Newcomb following the death of Dean Walter S. Rodman, December 31, 1946.

He entered the Engineering School in 1925 when President Newcomb was Dean of Engineering, and received his B.S. degree in 1929. For three years he was connected with the Westinghouse Electric and Manufacturing Co. first spending a year in the company's graduate student course and then two years as research engineer in the Westinghouse Research Laboratories. He specialized in electronics. During these years he attended the University of Pittsburgh's night classes in his field.

Returning to the University in 1932, he entered the Graduate School and in 1935 received his Ph.D. in physics. Dr. Quarles remained at the University to serve for five years as instructor in electrical engineering. He became assistant professor in 1940 and associate professor in 1942.

At the University he was active in Theta Tau, serving as chapter adviser, the American Institute of Electrical

Engineers, the Engineering Journal, Raven Society, Tau Beta Pi and Sigma Xi.

Dr. Quarles is a senior member of



the Institute of Radio Engineers, an associate member of the American Institute of Electrical Engineers, and in 1945 was contributing editor to Van Nostrand's *Scientific Encyclopedia*.

Virginia Alumni News

Clifford S. Strike Presented the Medal of Freedom

The man who headed the organization which built temporary housing for 4 million homeless Germans after World War II is Clifford S. Strike, Kappa '24, president of F. H. McGraw and Co., Hartford, Conn. Recently he was presented the Medal of Freedom, one of the highest awards which can be made to a civilian.

Strike came back to the U. S. a number of months ago after playing an important part in what is termed "the biggest construction job in the world." He was chief of the Building Materials, Construction and Forestry office of the U. S. Military Government for Germany. Later he was deputy chief for reparations, and was

the American member of a four-nation group which evaluated German industry as a preliminary step in carrying out settlements ordered by the Allied Reparations commission.

As the McGraw company's president, Brother Strike has been responsible for more than \$200,000,000 of construction work, including the \$36,000,000 Bermuda Naval Air Station and the \$31,000,000 Jayhawk Ordnance Works. For these jobs, the company won the Army-Navy "E". Brother Strike was awarded the Meritorious Civilian Service award for

the Bermuda project. The firm's wartime construction also included a \$17,000,000 aluminum rolling mill in Alabama and a \$7,000,000 improvement at the U. S. Submarine base in New London, Conn.

Brother Strike joined the newly formed McGraw company in 1930 as assistant vice president. In 1941 he became president of the firm, which now has headquarters in Hartford, Pittsburgh, Gary, Ind., Middleton, Ohio, Chicago and New York.

Illinois Alumni News

We are living in a dying and decadent age. Youth is corrupt, lacking in respect for elders, impatient of restraint. Age-old truth is doubted, and the teaching of the fathers questioned.

The signs of the time forecast the destruction of the world at an early date, and the end of time.

... Inscription on an ancient Egyptian tomb.

Boy: "What is meant by a man attending a convention as a delegate-at-large?"

Father: "It means that his wife didn't go along with him."

Truth in advertising was upheld when some shirts, said by their manufacturer to be able to laugh at the laundry, came back with their sides split.

Uncle: "You boys of today want too much money. Do you know what I was getting when I married your aunt?"

Nephew: "Nope, and I bet you didn't either."

"Does your husband play cards for money?"

"I don't think so, but those who play with him do."

A timid-looking little man was being kidded by a group of merry-makers at the club.

"What are you—a man or a mouse?"

"A man, of course."

"Why are you so positive?" continued the other.

"Because my wife is afraid of a mouse."

An old lady kept a parrot which was always swearing. She put up with the bird's language during the week, but on Sunday she always kept a cover over the cage . . . removing it on Monday morning. One Monday afternoon she saw the minister coming toward the house, so she again placed the cover over the cage. As the reverend gentleman was about to step into the parlor, the parrot squawked: "Damn short week."

Letters to the Editors

December 10, 1946

Dear Brothers Howe and Mercer:

The Spring, 1946, issue of *The Gear* was awaiting for me when I returned in November from field work in the Aleutian Islands. I was especially interested in the article by Bro. William E. Wickenden (Hon. Delta), reprinted from the *Case Alumnius*. With most of what Brother Wickenden has to say there will be little disagreement on the part of informed engineers and scientists, I am sure, but the subject of a National Scientific Foundation, and the several bills which have been introduced to authorize the creation of such a Foundation, is a controversial one, and it is but just, I think, to permit differing opinions to be heard. At the same time it must be recognized that much has happened, in Congress and elsewhere, since Brother Wickenden's article was originally written, so that he might feel impelled to modify some of the statements in his article, were he to rewrite it in the light of subsequent events.

In preamble, it might be well to remark that the entire subject is now in a state of uncertainty, as none of the bills was passed, and therefore all died with the 79th Congress. However, new bills will undoubtedly be introduced in the 80th Congress that will resemble the old ones to a considerable extent, and therefore, the salient points of difference between the principal bills may profitably be discussed. Parenthetically, it may be mentioned that Talcott Parsons has reviewed national science legislation in an article to appear in the *American Sociological Review*, preprinted in *The Atomic Scientist*, Vol. 2, nos. 9 and 10, Nov. 1, 1946.

The principal differences between the Kilgore Bill (S.1297) and the Magnuson Bill (S. 1285) are three. One, as stated by Dr. Wickenden, is in the method of administration and control; another, is in the arrangements for the ownership of the patent rights in patentable discoveries arising from research supported by the Federal Government. The third, is the inclusion (in the Revised Kilgore Bill, introduced in October 1945) of the social sciences as one of the basic scientific fields in which research is to be done.

These three points were the principal sources of controversy between the proponents of the two bills, and will be considered here, although the bill finally passed by the Senate (S. 1850) represented a compromise on all three of these points and commanded a very considerable degree of support from most scientists and engineers who considered the problem. For instance, the Council of the

American Association for the Advancement of Science, which may fairly be regarded as a representative group, voted to support S. 1859 by a vote of 233 to 10.

The proponents of the Kilgore Bill argued that the Magnuson Bill was "administratively unworkable," because of the lack of a responsible administrator. Some have also felt that the provisions of the Magnuson Bill might result in the development in this country of a "scientific oligarchy," not amenable to the will of the people, and heedless of the social consequences which will inevitably flow from the manner in which the research funds are allocated.

In considering the subject of the patent provisions in the two bills, it is important to remember that the provisions in both reflect wartime experience; the differences arise from differing attitudes toward that experience. The Magnuson Bill followed the practice of the OSRD, which permitted private business to patent results of work supported in whole or in part by Federal funds, unless the contract under which the work done provided otherwise. Most of the research supported by the OSRD was concentrated in a few of the largest university and industrial laboratories. The result has been that, although much of this work was largely paid for by the taxpayer, the patentable results have become the property, in many cases, of the few large corporations that controlled the laboratory facilities in which the work was done. (One wonders what the attitude of the corporations would have been had the scientists and engineers who actually did the work endeavored to retain ownership of the patents.) It is, I think, arguable that the country would be better off if these rights had been retained by the Federal Government, and so been made available to all the taxpayers, without payment of royalty. It is, however, understandable that those whose associations have been with the larger industrial research organizations, such as American Telephone and Telegraph, Western Electric, General Electric, the Bell Telephone Laboratories, and similar groups, should prefer a bill, like the Magnuson Bill, which would guarantee the continuation of the spending of government money for scientific and technologic research for private benefit, to a bill, like the Kilgore Bill, that proposes that such benefits shall inure to the general public, which pays for them. The great majority of engineers and scientists, having economic interests not exactly identical with those of the not entirely disinterested advocates of the Magnuson Bill,

might well consider whether the provisions of the Kilgore Bill accord more nearly with their own interests in the matter, as well as with those of the American people as a whole.

The third important provision in the Kilgore Bill (revised) that was lacking in the Magnuson Bill was the inclusion of the provision for a division of social sciences. In these days, when the rightful prospects of the unrestrained use of atomic energy for military purposes confront every thoughtful citizen, it would hardly seem necessary to labor the thesis that our mastery over nature has outstripped our knowledge and control of social mechanisms. The labor crisis, which so concerns Dr. Wickenden, as it does many other citizens, is a social problem, rather than a technical one, and the proposition that more light, rather than more heat, is needed for its solution, should commend itself to every citizen, but especially to the scientist and the engineer. It might be mentioned that, in a poll of its membership taken by the AAAS, 67% favored government support of research in the social sciences. However, the provision for the division of social sciences was deleted from S. 1850 before its passage by the Senate.

Unfortunately, at the present time, owing to the failure of any bill to pass Congress, and to the large sums made available to the Army and Navy, basic scientific research in this country is rapidly passing under the control of the armed services, and thus the military domination that Dr. Wickenden feared as a consequence of the Kilgore Bill is coming to pass. The remedy, it seems to me, as to many others, is a continuous and united effort during the next session of Congress to secure the passage of a generally acceptable bill.

The opinions in this letter are entirely unofficial, and are not to be interpreted as being those of any organization with which the writer is connected.

Yours in H & T,
ROBERT R. COATS,
Epsilon '31

1850 Forest Hills
East Cleveland, Ohio
March 3, 1947

Dear Brother Howe:

Enclosed herewith is correct address information on myself. Please change your records accordingly.

I returned from India in September, 1945 and rejoined the Standard Oil Company of Ohio in November of the same year. I am in the Transportation Department as Assistant to the Vice President.

THE GEAR, fall 1946 issue, was interesting reading. I had not seen any other issues for a long time. Keep up the good work.

Yours in H & T,

CHARLIE SPAHR, Zeta '34

"Thanks for them kind words, stranger!"

96 Van Buren St.
Apt. #1.
Peoria, Illinois
December 22, 1946

Dear Brother Howe:

It has been quite some time since you heard from me. Like a lot of other fellows I have not had a permanent address during the war. Although I did not serve directly in the armed forces due to occupational deferment, I did spend most of my time working directly or indirectly with them as a technical adviser and research engineer. I have been back at my regular job as a field engineer for Caterpillar Tractor Co. for about a year.

Much of my time is spent in travelling and I am not at home a lot, but my mailing address is 96 Van Buren, Apt. #1, Peoria, Illinois. Please send my GEAR to that address. I am looking forward to seeing the spring issue as I have not seen one for a long time.

Yours in H & T,

CLATE A. GATLIN, Chi '41

Welcome back to our mailing list, Brother Gatlin. We hope many others will follow your example.

1317 44th S.W.
Seattle, Washington
March 7, 1947

Dear Brother Howe:

I would very much like to order a Theta Tau key for my watch chain. I was initiated into Kappa Chapter at the University of Illinois in 1934.

Incidentally, I have always noticed that you appreciate information regarding one's activities. The Fall 1946 edition of the GEAR was especially interesting mostly because of the letters which you had received. It is the one tie which keeps me in touch with my college experience. The last time I contacted you, I had just been transferred from Buffalo, New York to this new location as a member of the Bell Aircraft B-29 Committee. As time passed on I knew that this was to be my home, a land of forests and streams, of countless lakes filled with hungry trout, with 30,000 miles of mountain trails kept in condition by the Forest Department, and a land with relatively cool summers and warm winters.

Well, a lot has gone on in between but now I am chief engineer for the Kirsten Pipe Company and our aluminum barreled pipes are sold all over the world. Our photo-electric pilot, an automatic steering gear for small boats is a nationally distributed product, so that production manufacture can happen in the Northwest. Also we are reputed to have the finest small plant in the world.

However, this is not essentially a manufacturing area and probably will not be as long as the great market for products of the heavier type remains in the east. We do have many natural incentives for some kinds of manufacture, such as water transportation, gateway to the orient and Alaska; also cheap electrical power.

Nevertheless, there is a great deal of talking, planning, research, and investigation underway by many companies in regard to new plants and to their possibilities. Thinking "is in the air," in the past two years I have looked over about 200 inventions, fully investigated about

25, and placed 10 of them with companies who are now manufacturing them on a royalty basis. New products is the answer for many an old plant in this troubled and transitory period, and also the answer to many new groups wishing to establish themselves in a manufacturing way.

Well, I must not get wound up, as I am quite enthusiastic about this country. Please note my new address above.

Yours in H & T,

WILBUR W. BETTS, Kappa '35

Those lakes full of hungry trout interest us, Brother Betts. Maybe we can at least take a vacation out there sometime. Now concerning a key, the Fraternity has only the badge and a recognition button; the key is used exclusively by honor societies.

In Memoriam

Walter Sheldon Rodman, Honorary Pi, Dean of the Engineering School of the University of Virginia, died at the University of Virginia Hospital, Charlottesville, Virginia, of coronary thrombosis on December 31, 1946. He was born September 1, 1883, at Wakefield, Rhode Island, the son of Charles Lewis and Imogene Ethel Sheldon Rodman. He was graduated from Rhode Island State College in Kingston with a Bachelor of Science degree in 1904, and from 1904 to 1908 was an instructor in Physics, Mathematics, and Electrical Engineering at that school. He then took his Master of Science degree at the Massachusetts Institute of Technology, and in 1910 he joined the faculty of the University of Virginia as an assistant professor of electrical engineering. Three years later he was made an associate professor and in 1933 he became Dean of the Engineering School, succeeding Dr. John Lloyd Newcomb who was appointed President of the University of Virginia. He was a fellow of the American Association for the Advancement of Science; fellow of the American Institute of Electrical Engineers, and vice-president of Southern District, Number Four, from 1929 to 1931; member of the Society for the Promotion of Engineering Education; member of the Illuminating Engineering Society; member of the American Association of University Professors and a member of the Virginia Academy of Sciences. He was a member of Phi Beta Kappa, Sigma

Xi, Tau Beta Pi, and Phi Kappa Sigma Fraternities, and was Secretary of Beta of Virginia of Phi Beta Kappa since 1922. He was also a member of the Raven Society and the Colonade Club of the University of Virginia, and was initiated as an Honorary Member of Pi Chapter in 1924. He took a keen interest in the affairs of Pi Chapter, and was a source of inspiration in engineering for all of his students. Surviving is his wife, the former Sarah Wilcox Palmer, of Wakefield, Rhode Island.

Wilson Buford Davis, Iota '29, aged 38, was instantly killed with all other occupants of a plane that crashed during a storm on Cobblestone Mt. in the San Gabriel Range a few miles from the Los Angeles airport to which it was flying, on November 13, 1946. A native of Paducah, Kentucky, he graduated as a Mining Engineer from the Missouri School of Mines in 1929 and came west immediately after graduation. After some years of practical experience he went to the Golden Anchor Mine near Burgdorf, Idaho and was its manager when the mine closed in 1940. He was then instrumental in reopening the old silver-lead mines at Tecopa, San Bernardino County, California, and at the time of his death was returning from a lead conference in Salt Lake City. He was Vice President of the Shoshone Mining Co. and the manager of its operations at Tecopa since 1940 and also Vice President

of the Arizona Prospecting Co. The family home was at 10600 Lindbrook Drive, Westwood, California. By his untimely death the mining profession has lost an able and energetic mine operator who contributed much to the production of vital metals during the war period.

Robert William Burger, Epsilon '29, aged 39, died on September 25, 1945. He was born in New Castle, Pennsylvania on May 25, 1906. His family moved to Los Angeles in 1909 and he completed his high school education there. He then attended Pomona College and while there became interested in geology and after graduating in 1927 entered the University of California in Berkeley as a graduate student in geology. He remained at California for two years and in 1929 joined the staff of the Texas Company. During his first summer he met Alice Brown of Klamath Falls, Oregon, and they were married in 1932. After working for some time in the valley regions of California he was appointed District Geologist for the Texas Co. in Bakersfield in 1942, and held that position at the time of his death. In college he was captain of the football team and participated in several other sports. He was a member of Sigma Xi and of the American Association of Petroleum Geologists. Surviving are his widow, his father, Howard Burger, and a sister, Mrs. Geo. Stancer.

Ray Alfred Snyder, Sigma '29, died suddenly on August 13, 1946. He was a graduate in Ceramic Engineering and active in the work of the American Ceramic Society. At the time of his death he was superintendent of the Stupacoff Ceramic and Manufacturing Co. in Latrobe, Pennsylvania. He was the son of Mr. A. L. Snyder, 249 Hinman Ave., Columbus, Ohio.

It was only recently that the GEAR was informed of the death of James Waller Workman, Rho '30, Captain U.S. Army, which occurred on December 24, 1942, near Buna, New Guinea, while leading his men against a Japanese machine gun emplacement. He was born on May 16, 1907 in Burlington, N. C., the son of Mr. and Mrs. James M. Workman. He graduated at North Carolina State in 1931 with a B.S. degree in Architectural Engineering. He was a Knight of Order of St. Patrick, a member of Delta Alpha Sigma, Engineering Council, the best drilled squad his sophomore year, Scabbard and Blade, and was R.O.T.C. major his senior year. In 1931 he went to

LaPorte, Texas and to Houston, Texas in 1933, and in February of 1934 joined the Army as a private. He served at Fort Sam Houston in many capacities and was promoted through various grades to technical sergeant. In 1940 he went on active duty as reserve officer and on September 11, 1941, was promoted to first lieutenant and assigned to staff duty. He was sent overseas in April of 1942 to Australia and was promoted to the rank of captain in July. The Distinguished Service Cross was presented to his wife, Eugenia Plock Workman, who with his parents and a sister of San Antonio and two brothers survive.

Harrison Williard Smith, Honorary Eta, aged 74, died in Papeari on Tahiti of the Society Islands in the South Pacific on January 3, 1947. He had lived there over 25 years. After graduating from Harvard College in 1895, he entered M.I.T. for two years and received his B.S. in 1897. From 1898 to 1901 he taught physics; and from 1901 to 1917 he taught electrical engineering at M.I.T. becoming an associate professor. In 1901 he went on the Technology expedition to Sumatra as one of the observers of a total eclipse of the sun. In 1909 he went to the South Sea Islands, Australia, New Zealand and Malaya and as the result of his studies was made a Fellow of the British Royal Geographic Society and of the Royal Asiatic Society. In 1915 he was at Verdun as an ambulance driver in the American Volunteer Ambulance Corps and in 1917 was appointed by the Navy as an instructor in Naval Aviation at the Institute. In 1921 he went back to Tahiti and took up his residence in Papeari. His life work was to seek among the other islands for fruit and plants not found on Tahiti and bring them back to foster their growth there. For his efforts the French Government honored him as "Chevalier de Merite." He was not married and with the exception of a few personal bequests his entire fortune of over \$600,000 was left to Harvard College.

David Cooper Bowen, Mu '43, of the U. S. Army, was killed in action in France on January 8, 1945. He entered the army only a few months before graduating as a chemical engineer and had been an excellent student. He went overseas in November 1944. He was the only son of Mr. and Mrs. David J. Bowen, South Princeton Avenue, Wenonah, New Jersey.

Philip Alfred Embury, Epsilon '18, died suddenly while playing golf with his wife the

afternoon of October 27, 1940. He was born June 12, 1891, and entered the college of mining at the University of California in Berkeley in 1914. On April 3, 1917, he made an emergency withdrawal from college to enter the army and served as an officer in the airforce of the AEF. He did not return to college after the war but entered business in San Francisco. At the time of his death he was with Witter & Co. of San Francisco. He is survived by his wife, Mrs. Hazel Embury, 1331 Grove St., Berkeley, California.

Tilman Orin Larson, Psi '42, died in Kalispell, Montana, on January 11, 1946, after being ill for some years with tuberculosis. He came to the Montana School of Mines from Kalispell and was compelled to leave because of poor health at the end of his sophomore year. He then spent a short time at the sanitarium at Galen, and then went to Tucson where he was a patient at St. Mary's Sanitarium for nearly four years. He spent the last two summers at his family's summer home on Flathead Lake. In October he contracted pneumonia and although he recovered from that he was unable to regain his health. He was 27 years old at the time of his death. Surviving are his parents, Mr. and Mrs. Hans Larson of Kalispell, two brothers, two sisters, and a multitude of mourning friends.

Alfred Gardner Ranney, Eta '13, a charter member of the chapter died on May 27, 1944. He graduated as a civil engineer and went to San Antonio, Texas, where he immediately joined the staff of the Suburban Utilities Corp. In 1916, he joined the engineering firm of Dupuy & Ranney in San Antonio but early in 1917 joined the U. S. Army, and was Captain of the 1st Bn. 65th Reg. of artillery AEF. After his return home in 1919 he joined the firm of Bartlett & Ranney, Inc., in San Antonio. At the time of his death he was with the U. S. Engineers at Galveston, Texas. His widow Frances, lives at Terrell Road, Box 114D, Rt. 8, San Antonio, Texas.

Waldemar Arthur Knoll, Jr., Beta '45, was killed in action in France on June 21, 1944. He came to Houghton from Ironwood, Michi-

gan, and had completed several years as a student of electrical engineering when he joined the armed forces. He held the rank of corporal but in volunteering for overseas duty was reduced to private. He died during the invasion of France. He was the son of Waldemar Knoll, 709 E. Ayer Street, Ironwood, Michigan.

John Griffith Magoffin, Beta '40, Major U.S.A.F., was killed in an airplane crash in this country on October 29, 1945. He came to Houghton from northern Minnesota and graduated as a mining engineer in 1940. He joined the army immediately and received his preliminary training at Ontario, California. No information is available at this time as to whether he saw combat service. He was the son of Beriah Magoffin, Deerwood, Minnesota.

Harry Chalmers Lieb, Epsilon '41, was born August 18, 1918. He attended George Washington High School in Los Angeles with an outstanding scholastic record. He was a three-year letterman on the football team, a star track man, student body president, and football captain in his senior year. He graduated from High School in 1936 and enrolled at U.C. as a geology student in 1937. He continued his football playing as a half-back for U.C. He left the University in his senior year to enlist in the Navy as an aviation cadet, received his primary training at Oakland California Naval Air Station, then transferred to the Naval Air Station at Jacksonville, Florida where he received his wings and commission as Ensign in April 1942. Granted a 15-day leave at that time he returned to California to marry Margaret Ann Beeder whom he had known at U.C. They returned to Jacksonville where he was an induction course glight instructor. While on a training flight on August 12, 1942, his plane crashed killing him instantly and seriously injuring the student pilot. Ensign Lee M. Murphy, USNR, accompanied the widow and Harry's remains back to California where he was buried with full military honors at the National Cemetery at San Bruno, following chapel services at Martinez on August 19, 1942. He was survived by his wife, mother and father, a sister, Mrs. Blanche E. Reagan, and a brother, Oran F. Lieb, all of Los Angeles.

T b e G E A R *o f* T H E T A T A U

OFFICIAL PUBLICATION OF THE FRATERNITY

P. L. MERCER, *Omicron '21* and J. W. HOWE, *Omicron '24*

Editors

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FRATERNITY FERTILIZER

The most important single factor influencing the success or failure of fraternity life on any campus, says Dean C. S. Johnson, of U.C.L.A. is the administrative effort made by the institution itself to guide and strengthen the chapters it may have. His conclusions are the result of a questionnaire canvas of the fifty-nine fraternities of the National Inter Fraternity Conference.

Prominently mentioned as goals toward which administrative efforts should be directed are the following: financial supervision, sensible rushing systems, regular inspections to enforce housing standards, intramural athletics and other inter-fraternity competitions, general supervision of social affairs and encouragement of faculty cooperation.

Of 75 colleges where Dean Johnson's report finds a superior climate for best development of fraternities presently exists, Theta Tau has chapters in the following: Ohio State University, University of Kansas, University of Louisville, Missouri School of Mines, University of Utah, Purdue

University, University of Wisconsin, University of Minnesota and University of California.

THE CONVENTION

The robust health of Theta Tau was never better demonstrated than at the Sixteenth Biennial Convention in Louisville last December. The combination of Kentucky hospitality, pleasant surroundings and well planned programs capped with a fine attendance of delegates, alternates, faculty advisers and alumni made the Convention a most memorable one.

For the first time, Chapter Faculty Advisers met together. Almost to a man, they were amazed to find how similar their problems were and how interested all of them were in these problems. Definitely, this meeting started a trend and more sessions of this type will be held.

General Fraternity business, chronicled elsewhere in these pages, was highlighted by the elevation of Ralph W. Nusser to the highest office of the Fraternity as Russ Glass, after seven years in the chair retired to the position of Delegate at Large.

Letters From the Chapters

Alpha Has Good Year



head a little higher.

In November we initiated two pledges, Lin Grisham and Calvin Meyer, and in February initiated a group of five pledges, swelling our active membership to twenty-five members. The new initiates were Robert Wonderluck, Walter Manson, Harlan Johnson, James Tobin, and James Shelsky. We have two pledges, and fired the opening gun in a new membership campaign with a smoker held early in March.

Our new Faculty Adviser is Professor Henry C. T. Eggers, initiated as an honorary member last fall. We'll always remember Fred Teske, our former adviser, for his tireless efforts in keeping the Chapter going through those long, lean war years.

The Chapter house is full to capacity with active residents. Russ Talty, who graduated

It's been as great a year as we had hoped, for the Chapter house as well as for Alpha Chapter. Revitalized with a new interior paint and paper job, our venerable establishment is now holding its figurative

in December, was replaced in the house by Bob Rosene, who is back from the Navy and working on his Master's degree in Civil Engineering. Another new and very active resident is Shadrack, a young, energetic and resourceful Cocker Spaniel who is a very likeable young fellow, but a dismal failure as a watch dog.

Alpha Chapter has continued its activities in the Inter-Pro Athletic League with undiminished enthusiasm, and we proudly announce the acquisition of a brand new trophy as evidence of our success in the Inter-Pro Bowling League.

An informal dinner-dance was the social feature of the Fall quarter, and we're looking forward to the renewal of the traditional Tri-Tech Ball with a semi-formal dinner-dance planned for April with Kappa Eta Kappa and Triangle Fraternities.

New Chapter officers after elections in March are Walter Kiriluk, Regent; John Duntley, Vice Regent; Robert Wonderluck, Scribe; and Calvin Wick, Treasurer.

Yours in H & T,

JAMES F. SULLIVAN,
Corres. Sec.

Sixty-Seven Actives at Beta



Beta Chapter wishes to extend its greetings to all chapters of Theta Tau. We are continuing fully at present with an active membership of sixty-seven, and a spring pledge class of seven men.

Having settled most of the details which arose after opening the kitchen, we are now progressing at the usual high standards of Theta Tau. On November 10, 1946 we entertained the coeds and members of the faculty at a buffet supper in the Chapter house. The supper was very successful and created an increased feeling of friendliness on the campus. On December 14, 1946 we staged our annual Millionaire's party. With eye shades down and shirt sleeves rolled the fellows added a realistic touch to "Black Jack," "The Twenty Six Game," "Roulette", and several other games of chance. At the evening's end everyone discovered they had a wonderful and inexpensive whirl at life in Monte Carlo.

Recent initiates not mentioned in the last issue of the GEAR are: D. Leonard, S. Rideout, R. Johnson, J. Ferrell, M. Bunting, T. Parenti, and B. Hikes. It gives us pleasure to announce too, that Brother Ed. Snyder, Jr. has been transferred from Lambda Chapter to Beta Chapter. We welcome Ed whose father was an early member of Beta.

The officers are: Regent, Bill Turnbull; Vice Regent, Dick Sampson; Treasurer, Bob Pierce; Scribe, Wallie Hansen; and Corresponding Secretary, Bill Foth. Mr. L. F. Duggan is our faculty adviser. Graduate members and faculty advisers of Beta Chapter now instructing on the Michigan Tech Campus are: J. Harrington, W. Longacre, H. Hawn, Dr. R. Drier, W. Polkinghorne, Dr. C. Eddy, W. Gertz, and Dr. A. Snelgrove.

We were recently honored by a visit from Brother Nils E. Nilson, Beta '24, who has returned to the United States from the Fiji Islands for a short visit. We welcome these visits from older members and look forward to more of them in the future.

At the present time we have a good lead in the Intramural standings, having just taken the honors on basketball, and running a hotly contested second in Hockey. We are now

to be a comedy, but we came out on top, full of snow, 6-2.

During the course of the Carnival we held an elaborate cocktail party, attended by more



looking forward to a rugged season of softball. Our last year's team will be but slightly changed, and with the return of many former stars should be in excellent shape.

The fraternity is well represented on the Tech Huskie's Basketball and Hockey teams. D. Wood, B. Vander Klipp, and B. Hikes are turning in top-notch performances in the bucket tossing line, while A. Dorffi and B. Kestner do the skating as Phil Waste tends the goal.

Through the efforts of a considerable number of members of Beta Chapter the Michigan Tech Winter Carnival turned out to be one of the finest yet. D. Van De Weghe was general chairman; W. Cary had charge of the Ice Review; J. Goudzwaard handled the finances; publicity was taken care of by H. McPhail and W. Parker; G. McKereghan and N. Eddy conducted the Queen campaign; B. O'Neill took care of the stage review and D. Sampson the snow statues.

This year something new was inaugurated. We played our perennial rivals on the campus in a snow-shoe softball game. It turned out

than 200 persons. Everyone present, including faculty members, made extremely favorable comments on the success of the party, and it has been decided to make it an annual affair.

We were fortunate in having J. Kerwin '45 and R. Christensen '44, visiting with us over the period of Winter Carnival.

A news-filled Rhombohedron which brought the Chapter up-to-date since pre-war days was published in December and sent out. We would appreciate very much any information from Alumni members to complete our address files.

The house is starting a scrapbook which is being handled by the Corresponding Secretary. We would appreciate any contributions from Alumni of clippings, photographs, etc. to make this book as complete and interesting a record of life here at Beta as possible.

In closing, we extend best wishes to all members of Theta Tau.

Yours in H & T,

WILLIAM C. TURNBULL, Regent

WALTER J. HANSEN, Scribe

Gamma Gaining Momentum

GOLDEN
■
COLORADO

Gamma Chapter sends best wishes to all chapters of Theta Tau after a period of inactivity on the Mines campus. This past year has been slow but we are gaining mo-

mentum rapidly. We have 12 pledges and an initiation is planned in April.

The new chapter officers are: John Wanner, Regent; Jim Clemens, Vice Regent; Bill Brown, Scribe; E. T. Wood, Treasurer; Bill Coulter, Marshal; Doug Rogers, Inner Guard; Bill McNamara, Outer Guard. Chapter adviser

is Professor M. I. Signer who was recently appointed Dean of the school to replace Dean Boyd who was appointed Director of the U. S. Bureau of Mines by President Truman.

Gamma sponsored the homecoming dance last fall and in spite of a record blizzard, the turnout was good and the party was a success. This spring we are sponsoring another dance in conjunction with another fraternity.

Through the fine work of Brother Ben King we have the honor of bringing Governor Knous of Colorado out to address the student body.

Mines renewed the annual Engineer's Day this year and Gamma Chapter sponsored a rock drilling contest with a ten dollar prize to the winners. This contest was one of the highlights of the whole day.

All in all things are picking up this spring and you will hear more from us next fall.

Gamma Chapter extends its sincerest fraternal greetings to all its alumni and to all brothers of Theta Tau.

Yours in H & T,

BILL BROWN, Scribe

Delta Plans Increasing Activities



This letter is submitted to your office in reference for the spring GEAR as requested by your letter to Delta chapter, dated February 27, 1947.

Our officers are as follows: Regent, R. C.

Gerhan; Vice Regent, D. F. Soula; Scribe, C. S. Bacik; Treasurer, M. J. Zuzask; Marshal, F. S. Tackas; and Corresponding Secretary, J. J. Dailey. Our chapter adviser is Professor Reardon.

Delta chapter has 45 active members at the present time.

Last semester the chapter was active, however, this coming semester will be more active with numerous activities on the program. The chapter held an all school dance February 28 which was very successful and gave the Case engineer a night of relaxation. A joint get-together with Blue Key Fraternity and Tau Beta Pi Fraternity has been planned at the Warner and Swasey Observatory culminating in a lecture by Dr. McCuskey. Two dinner meetings as a minimum have been planned

during the coming semester which will take place at the Phi Kappa Psi and Phi Delta Theta Fraternity Houses. This chapter will elect new pledges within the semester with formal initiation following later, approximately the middle of May. This chapter will select the most outstanding senior to graduate in June which results in the recipient's name being placed on the Theta Tau Plaque in the Office of the Dean.

Delta Chapter has many outstanding men in campus activities, namely, S. Cicerello, State half-mile champion; R. C. Haas, Vice President Case Senate; R. W. Hoffman, President Tau Beta Pi and President Case News Service; E. H. Loepke, President Senior Class; R. W. Neville, Editor Case Tech and President Blue Key Fraternity; B. A. Wiczorek, Business Manager Case Tech; J. J. Dailey, President Phi Kappa Psi Fraternity; and R. T. Gorman and R. Penovich, most valuable football players "Les Bale Award."

I hope that this letter contains the desired information as requested by your office and Delta Chapter is always willing to serve you.

Yours in H & T,

RICHARD C. GERHAN, Regent

Epsilon Making Comeback



It has been ten months since Epsilon Chapter was reactivated from a dormant period during the war. During those ten months we feel that we have made great advances, but by no means have we reached the top.

There is yet much to be done by Epsilon.

At present our membership consists of thirty actives. We have eight pledges. The new chapter officers are: Frank M. Hansen, Regent; Tom Gay, Vice Regent; Oleg Sherby,

Scribe; David Slemmons, Treasurer; Garniss Curtis, Corresponding Secretary; Bill Whitmire, Marshal; George Simpkins, Inner Guard; and Clarence Miller, Outer Guard. Our chapter adviser is Dr. Howell Williams, the Head of the Geology Department.

Our Corresponding Secretary, Garniss Curtis, and George Manning have been busy sending letters to our alumni. Four hundred letters have been sent, but unfortunately many letters have returned unclaimed. Anyway, we are plugging away at this project until we get as good a check upon our alumni as possible.

During the past semester Epsilon had two

informal parties and this semester we have plans for social activities such as a dinner dance, a picnic, and a barn dance. Also, we are continuing our bi-monthly luncheons. These luncheons have certainly been a success in creating good fellowship among the brothers.

On March 21 we are holding an initiation of our pledges. A banquet at the Hotel Lake Merritt in Oakland will follow the initiation.

Five Theta Taus graduated from the Uni-

versity of California last February. They were: Tom Landreth, Ed Borglin, Cliff Caldwell, Art Anderson, and George Wishart.

We of Epsilon Chapter are looking forward to a visit from Brother Erich Schrader sometime this spring.

In closing, Epsilon Chapter extends fraternal greetings to the other Theta Taus.

Yours in H & T,

FRANK M. HANSEN, Regent

Zeta Assuming Leadership Again

LAWRENCE KANSAS

After a fall semester's reorganization and mending, Zeta is now functioning in a manner comparable to traditions set before its temporary

inactivity. Zeta actives and pledges are doing a fine job in campus activity and in Theta Tau work.

Zeta chapter actives are once again holding the keystones in the Engineering School Administration and several are members of the University Teaching staff. Jim Waugh is now President of the Engineering Council with Morris Borene supporting him in the Vice Presidency of the Council. Morris also serves as Chairman of the Engineering School Elections Board. Bob Kunkle is top activity man for this year. He is Vice President of the senior class and the Senior Representative on the Engineering Council. Bob, Morris, and Joe Beeler are on the Engineering Governing Board. By virtue of these positions, Zeta has a firm grip on the political aspects of the K.U. Engineering School. Vern Foster is an instructor in the two full sections of descriptive geometry in the Engineering Drawing Department. Zeta's positions in the honorary scholastic societies are held by Vern Foster and Alvin Brubaker, Tau Beta Pi; and Morris Borene and Bob Kunkle, Pi Tau Sigma. The *Kansas Engineer*, the official publication of the Engineering School, is headed by Joe Beeler, editor. Morris Borene serves as associate editor and chief feature writer. The majority of the writing staff of the *Kansas Engineer* is made up of Zeta's Lee Nelson, Bob Brothers, Frank Van Benthams, Bert Ladd, Dick Marcum, Charles Shrake, and Dick Harris. Sam Campbell is sweating it out during the spring varsity football practice.

Chapter officers for this semester are:

Regent, Bob Brothers; Vice Regent, Claire Sommers; Treasurer, Frank Van Benthams; Scribe, Dudley Hanstine; Social Chairman, Charles Shrake; Rushing Chairman, Morris Borene; and Corresponding Secretary, Joe Beeler.

Initiation was held for Charles Shrake, Dave Hay and Alvin Brubaker. The rushing program for this semester was a huge success under the guidance of Claire Sommers, who was recently elected Vice Regent to replace Bill Weldon who was graduated at the end of the fall semester. Gene Beery, junior electrical; Ed Hansen, junior mechanical; Allan Persson, sophomore mechanical; Fred Gartung, junior civil; Ralph Wood, sophomore mechanical; Jim Deveney, freshman; and Dick Harris, freshman; were pledged during the early part of this semester.

Frank Van Benthams was selected as the chapter delegate to the National Convention at Louisville during the Christmas vacation. Frank made a good showing in his capacity as chairman of the constitution committee, member of the ritual committee, and as marshal during the formal initiation held during the convention.

Jim Jacobs and his wife, Genevieve, returned to K.U. this semester. Jim was a Lieutenant in the Army Engineer Corp. and served his main tour of duty in the Pacific Theater on Saipan. He is now living at 304 Indiana, Lawrence, Kansas. Dean Smalley, Bruce Wells, and Bill Weldon graduated last semester.

Theta Tau is well represented on the Engineering Faculty by Dean J. O. Jones, Charles Baer, G. W. Bradshaw, Loring Hanson, W. C. McNowen, and F. A. Russell.

Yours in H & T,

JÓE R. BEELER, JR., *Corres. Sec.*

Theta Embarks on Active Program



The past winter months have been bustling with activity as far as Theta Chapter is concerned. The campus has been enlivened by the return of many ex-G.I.'s who are eager for knowledge

and intent on making their college years profitable to themselves in every way. Theta Chapter has been a leader in the drive for a revival of college activities.

Theta Chapter has been able to forge ahead to a high standing under the very competent direction of its leader and Regent, Bill Glick. He has elected assistants in the persons of John Atwood, Vice Regent; John Tillinghast, Treasurer; and Joe Fontana, Secretary. Bill receives, naturally, unlimited cooperation from all active members and alumni on the campus.

As a fulfillment of its pledge to increase its strength, Theta did something which has not been done for several years, re-innovating a Pledge dance. The usual method of holding a Pledge Smoker was the first step in the approach this fall. After the smoker it was decided at a regular luncheon meeting to hold a Pledge Dance so that all the brothers could become more familiar with the pledges and so that the pledges could see what Theta Tau fraternity had to offer in the line of comradeship and social activity. The dance was a great success with over forty couples attending, including several of the alumni. We in Theta Chapter believe that such a function should be held prior to every initiation.

As a result of the pledging this year we have added a small, but certainly select, group of men to the ranks of Theta Tau. Roy Fisher, a very likeable M.E. who likes to swim (sometimes in the darndest places) and is a good man in a crew race; Walter "Lefty" Morykwas, working on the "Engineer", which is the Engineering school yearbook, in charge of getting pictures of the faculty; Bill Lameraux, the former Army Air Corps pilot from California who is an accomplished singer of ballads; Warren Saunders, a baseball pitcher with a quick wit; Bob Prochazka, stalwart of basketball and baseball fame; and last, but not least, Jim Hunter, a first rate showman who loves table crew, compose the list of the new brothers. Personal observation: Theta Tau is to benefit tenfold by their addition.

The formal initiation was held here at Columbia in the mezzanine of John Jay Hall with a dinner later at Hans Jaeger's. The dinner and social meeting following it was thoroughly enjoyed by all. It was a meeting which made all the new brothers feel glad they

had joined and all the older brothers very proud of their fraternity.

Referred to previously is the luncheon meeting that Theta has adopted. By holding bi-weekly meetings as part of a luncheon given by the chapter, Theta has accomplished at least these three aims: First, the brothers enjoy the company of the fraternity; second, the business at hand is dealt with conveniently and promptly, and third, it is held at a time which is convenient for every one as it facilitates the attendance of day students who may find it difficult to appear at evening meetings. So well received is the luncheon meeting that it has become a permanent policy of Theta Chapter.

The Engineering School has revived its Student Council at Columbia University. At first this may seem irrelevant, but when it is evidenced that Theta Chapter has been behind such a revival by a 100 per cent backing, the statement concerns the influence of Theta Tau. To indicate the propensity with which we have participated, it need only be mentioned that Ed Taylor and Bob McCaffery, two Hammer and Tongsmen, are Chairman and Vice Chairman respectively. Regular meetings are held at which important men in the field of engineering deliver pertinent addresses. The meetings have the full approval of the Engineering School Administration, even so far as to have classes delayed during the time for the scheduled meetings.

Another social function sponsored by Theta is an Annual Engineers' Dance. Recalling last year's dance, which was the revival of the pre-war annual affair, we find that it was given by Theta Chapter. It was a great success, and this year again Theta is working hard for a repeat.

To facilitate future reference to alumni, we are sending a questionnaire to each alumnus to determine his present address, if he is receiving the GEAR and other pertinent information which will aid the completeness of the chapter roll. In this manner, a complete postwar check on alumni may be obtained.

Concluding a check of our chapter roll we find that we are eligible to receive into the fraternity two honorary members. You will be hearing from us soon in this respect, for already proceedings have been started and we hope to initiate them before June.

In closing we extend our sincerest fraternal greetings to our alumni and to all members of Theta Tau.

Yours in H & T,
THEODORE BROCKMEIER
HARRY HALL

Iota Rounding up Alumni



Iota Chapter has again regained its pre-war strength on the campus of the Missouri School of Mines, and is trying to make up for lost time. The latest chapter count shows

that there are 41 active members and no pledges. At a recent meeting the members elected officers for the coming year. Jim McGovern was elected Regent; John Reilly, Vice Regent; R. Allan Crosby, Secretary; Bob Hackman, Treasurer; Bill Bishop, Marshal; Art Tapperson, Inner Guard; Jim Bowman, Outer Guard; and Ray Pickett was named to the post of Corresponding Secretary.

The chapter held a smoker a short time ago, and 90 men interested in Theta Tau showed up to enjoy the evening's entertainment. Dr. Schlecten, head of the Metallurgical Department, and a Theta Tau himself, was the principal speaker.

Professor Butler, our chapter adviser and head of the Civil Engineering Dept., has been busily engaged in Alumni work. Last semester the chapter prepared a news letter and sent it to all our old members telling them of the chapter activities and since that time letters have been coming in from all over the country.

Plans are being made for more frequent social gatherings with a monthly dinner for the members heading the list. At the recent St. Pat's celebration, the active members and the alumni members had a get-together and many pleasant memories were recalled.

George Miller, our delegate to the last national convention, recently won the St. Louis section A.I.M.M.E. scholarship for \$200, based on scholarship, activities, and membership in the student chapter of A.I.M.M.E.

Yours in H & T

RAY PICKETT, Corres. Sec.

Lambda Bulging at the Seams



The lean years have passed and now Lambda finds itself "bulging at the seams" with fifty-five active members on the roll. No doubt the other chapters are in a similar condition as a result of the influx of re-

turning ex-service personnel. Our activities, however, have increased along with the expanded membership. During the winter quarter, aside from the regular business meetings, we have had some outstanding lectures by experts in the fields of Professional and Leadership Development, Philosophy, and Industrial Psychology. Also, Lambda was honored with a brief visit and inspection by



Lambda Pledge Smoker, Winter '47

the Grand Scribe, Erich J. Schrader. On the social side of the ledger, we have had two pledge smokers, a ski party at Brighton, and an evening of dining and dancing at the Crown Room. Our participation in athletics has been only moderately successful as far as the win column is concerned. The basketball team had a perfect record prior to the final game—that of not having won a contest. But even this unique record was doomed to fall—for the other team defaulted. The bowling team, however, paced by Bob "Father Time" Weyher, is now roosting in fifth place.

Lambda's officers are: Regent, Robert C. Mayer; Vice Regent, H. K. Thurber; Scribe, Robert Lambourne; Secretary, Richard Anderson; and Corresponding Secretary, Robert Weyher. Professor George W. Carter, our very able and helpful faculty Chapter Adviser, was honored at the recent National Convention by his being elected to the office of Grand Outer Guard.

In closing, Lambda sends its best wishes for the well being of all Theta Taus.

Yours in H & T,

ROBERT D. HAYES, Corres. Sec.

Mu Has Located Nearly All Its Alumni



Greetings from Mu Chapter to the New Grand Officers, the GEAR staff, and all the brothers in Theta Tau.

Our chapter officers for the present school year are the following: Regent, William M.

Murphy; Vice Regent, George Hamich; Scribe, Ross B. Robinson, Treasurer, William K. Rey. We have reelected Mr. J. M. Faircloth to be our chapter adviser. The Fall '46 issue of the GEAR was in error, through an error of the Scribe, when Mr. Warren Keith was given as chapter adviser.

Graduation last quarter left us with fewer active members in the chapter, but the return of faculty members and alumni have increased the total chapter roll. At present there are 29 actives and 8 honorary and alumni members. As yet there are no pledges. Pledging will be held the first week in April, with initiation some time in May. A modified system and sequence of pledging is being tried to foster closer acquaintance with the new men. The emphasis during this pledging is going to be on obtaining sophomores and first-quarter juniors.

We are happy to be able to say that our

Alumni file is nearly 100 per cent complete; only about ten names remain unfilled with regard to present position and address. Unfortunately several inquiries have returned marked "deceased." These names have been sent to Brother Schrader for his files.

The chapter has become active on the campus after existing on a reduced schedule during the war years. Several projects are under way at the present time. One is the construction of a membership plaque to be placed in the Engineering Building. As plans are now, most of the work, including the name plates, will be done by the members. Another project is the construction of a pedestal and a large replica of the Theta Tau pin to be placed in front of the New Engineering Building. Theta Tau men have been and now are very active in the reactivating and operation of St. Pat's Engineering Association. A news letter is being published by the chapter as often as is practicable. Similar letters by the rest of the chapters would be most welcome.

All in all, affairs are in smooth running order in Mu chapter and further progress is being made.

Yours in H & T,

ROSS B. ROBINSON, Scribe

Omicron Holds Re-organization Drive



After disappearing from the scene during the war, Omicron Chapter is getting on its feet again. Behind this revival are four actives, Eugene Hogan, Charles Kippenhan, Leland

Hausler, and Joe Grabow, all returned servicemen and all married.

Following a visit from Grand Regent Nusser in February this group laid plans for a reorganization dinner to which a select group of prospective members would be invited. The dinner was held in the Iowa Mem-

orial Union on March 29, with 25 in attendance.

Coming back to the campus to lend a helping hand on this occasion were Paul Mercer, '21, of Keokuk; Al Carlson, '27, of Colfax; Luvern Kehe, '31, of Waverly; and Sid Smith, '35, of Muscatine. Carl Menzer, '21, Ned Ashton, '25, and Joe Howe, '24, of the Engineering Faculty were also on hand to make a total of seven old timers.

Paul Mercer, a founder of the chapter and Grand Inner Guard during the war years gave a fine talk on the origin of Omicron chapter and the national scope and objectives of Theta Tau. He was followed by Eugene Hogan who outlined the plans of the chap-

ter for the future. Brother Hogan stated that officers would not be elected until a new group could be initiated, following which, officers for the next school year would be chosen. Prominent objectives of the chapter are professional and social meetings, luncheons, and efforts to secure adequate representation of the Engineering College in campus affairs.

Following the meeting, students, alumni, and faculty talked informally and became better acquainted. Pledging will go forward this spring and it is expected that Omicron will be a going concern by the end of the semester.

Pi Roll Numbers 60



Your circular letter reminding us that we must get our letter in to the GEAR before the deadline, came in day-before-yesterday's mail.

We have a little report to all the chapters and some things to say to our alumni.

First off, our chapter adviser is again Dr. L. R. Quarles. "Doc" was appointed Acting Dean of Engineering to succeed the late Brother W. S. Rodman. We like to say we are proud of "Doc" especially, because "Doc" was an active initiate of Pi Chapter and as an undergraduate here, served Pi well in many capacities including that of Regent. His continued interest in our affairs has been lessened none because of his new duties.

The chapter officers for the remainder of this semester are: Bill Markwood, Regent; Don Hood, Vice Regent; Tom Patterson, Scribe; and Bill Barr, Treasurer. Jack Ticer, who was our Regent until the last meeting was given a vote of thanks by the Chapter in recognition of his service to the Chapter since last September. It was Jack who lead the almost complete reformation of the Chapter.

At the present the Chapter has a total of sixty active brothers. There are no pledges at this time but "rushing" is just around the corner. Pi has entered into the customary Rushing Agreement with the Trigon Society, a local competing fraternity. We will have two "get-togethers" with the rushing prospects and then we will extend the invitations to membership in April. The rivalry is getting keen (as it was before the war) because Trigon seems to be getting back on its feet. Soon after the rushing season will come the Departmental student elections, and Pi is going to make every effort to take all the officers.

The social event of the season is to be the Initiation-Banquet-Dance being held by our nearby Gamma Beta Brothers. This program to celebrate the birthday of Gamma Beta promises to be the resumption of not-so-long-gone fellowship the two chapters have enjoyed.

Pi's other activities for the Spring include the cosponsorship of the Engineer's Ball, a Fraternity Picnic, and very possibly an intramural softball team. On the heavier side, the Chapter is working up a current Alumni Directory for the use of the Chapter and for the eventual use of the GEAR when the DIRECTORY gets published again. Too, a few of the brothers who are graduating in June are making the preliminary plans for the formation of a Pi Alumni Association to be located in Charlottesville, Virginia. (just downtown from here). Apparently there are quite a few Theta Taus in and around Charlottesville.

One of our brothers, Earl Barnett, boxed on the University's Boxing Team. The team suffered losses at the hands of Wisconsin and Syracuse out of eight starts. Earl is one of the brothers of a two-family combination on our team. Earl's last bout this season (he fought in the 165 lb. and 155 lb. classes) was the clincher for the 6-2 victory over the United States Military Academy.

Another outstanding brother is our Rhodes Scholar James B. Whitlatch. He plans to sail in mid-October for England aboard the Queen Elizabeth. He won his scholarship in Atlanta this past December.

Positions occupied in and around school by Pi brothers are: President of Engineering, W. Warner Staley; Vice President, Neal Wade who, by the way, is the outstanding right-hand pitcher on the baseball team. The secretary of Engineering is Bill Barr, the Treasurer, Tom Patterson; and the Historian is C. William Hartman. Ed Heath holds down the

Presidency in the A.S.M.E. The reorganized ENGINEERING REVIEW Business Staff is occupied in three positions by Theta Taus.

Brother Staley holds down one-fifth of the University's Honor Committee in addition to his Engineering Department duties.

Garland Spicer, who flew the "Diplomat" run from Westover Field, Mass. is again back in school. For Garland's activities in the postwar Air Force see the Fall 1946 GEAR.

Yours in H & T,

T. T. PATTERSON, Scribe

Rho Contemplating a Log Cabin



Rho chapter started this season with a bang under the very able leadership of Regent Jack Barnes; Vice Regent, Pinky Dunn; Secretary, Patches Mears, Treasurer, Lester Woodall, and Corresponding Secretary, Bill Roe. We have had some excellent help and suggestions from our Chapter advisers, Professors T. C. Brown and L. M. Keever.

The first thing we did in the fall term was to look around and observe the fellows that we would like to have as members of Theta Tau. After checking the records of the suggested candidates, we put them through the proverbial mill and only the cream of the Tau has more campus leaders in its membership at the present time than any other single Engineering Fraternity. The new members, who weathered the storm are: R. W. Bivens, Wingate, N. C.; W. A. Carr, Farmville, N. C.; R. M. Jones, Salisbury, N. C.; D. F. Lefler, Albemarle, N. C.; E. F. Menius, New Bern, N. C.; R. J. Muller, Pleasantville, N. J.; R. B. Patterson, Littleton, N. C.; G. W. Rivenbark, Goldsboro, N. C.; R. P. Schmidt, Raleigh, N. C.; and R. A. Yates, Chadburn, N. C. These initiates bring our active membership up to 45 members.

We climaxed the initiation of the new members with the annual Founders' Day Banquet and Dance, which was held at the Woman's Club here in Raleigh. At the banquet, Vice Regent Pinky Dunn was master of ceremonies and did a commendable job of creating a feeling of good fellowship among the participants. J. H. Lampe, Dean of the School of Engineering, Chancellor J. W. Harrelson, and Professor T. C. Brown, our faculty adviser, gave short talks. After eating, everyone stood up, introduced himself and his date, and said anything else that happened to be on his mind. After the banquet, a private dance was held and a gala time was en-

joyed by all.

As regards our outside activities, we are working on a combined dance with Phi Psi, honorary Textile Society and Alpha Zeta, honorary Agricultural Society. N. C. State College has several dances in the winter and fall terms, but only the Junior-Senior dance, that is of any importance, in the spring term. It is our idea to initiate, with Phi Psi and Alpha Zeta, a dance to be called "Spring Frolics." It is planned to plow the profits back into a joint account with the other two societies and in two or three years, we hope to be able to put on a Spring Frolic that is a Spring Frolic. Stanley Teiser is ramrodding the affair for Theta Tau.

Another major project on which we are working is one that Professor T. C. Brown suggested to us. The social fraternities have their houses in which to hold their social functions, but the professional and honor fraternities, here at N. C. State College, must hold their affairs at the best possible vacant place they can find so Theta Tau is taking the wheel again and attempting to find or build a harbor in which the good ship Social Get-to-gether can anchor as the occasion may arise. A committee, composed of Dewey Lefler, Craig Stone, Don Weaver, Ira Helms, and Cliff Spruill was appointed and they dived into the project as if their future reputation depended upon its success. A sight has been selected overlooking a lake on Campus property; we have decided that we would like a log cabin affair; and Professor R. E. Shumaker, of the Architectural Department, has agreed to have one of his advanced classes draw up all the plans for us. In the near future, I hope to report to you that our log cabin is under construction.

We extend our most sincere and best wishes to our brothers of Theta Tau all over the country.

Yours in H & T,

BILL ROE, Corres. Sec.

Tau Chapter Full of Ambition



The growth of Syracuse University's College of Applied Science has indeed favored Tau chapter. This semester and the last promise to be among the most productive and ambitious in the history of our chapter.

The newly installed Regent is Stan Hoyt, assisting Professor Rising in Mechanical Engineering. Stan is also chairman of the ASME and a member of Orange Key, a local Junior Men's Honorary. George Hazenbuhler, a Phi Gamma Delta, is Vice Regent; Bob Sparling, a Tau Beta Pi, makes an able and affable Scribe; Len Black is Treasurer, and Bill Kopka is Corresponding Secretary.

Professor Donald E. Stearns, Head of the Department of Civil Engineering, will be our new adviser. He is a licensed Professional Engineer in New York, Massachusetts, and Rhode Island. Prof. Stearns is in ASCE, American Water Works Association, American Public Health Association, New York State Sewerage Works Association. A new summer camp involving 400 engineering students will be instituted largely as a result of his efforts. Besides being a real go-getter, one that Tau is honored to have with it, Professor Stearns is the proud father of twins.

Tau chapter has joined forces with Tau Beta Pi in sponsoring the Alumni Engineers' Ball at the Hotel Syracuse. This promises to be a very special event as well as a financial success. George Hazenbuhler is chairman of the affair.

Dean Mitchell has requested Tau to conduct class elections in our college of 1,300 students. Bill Kopka has been doing one swell job at it. However, Bill hasn't been able to explain how he was elected Vice President of the Junior class while organizing these elections. Bill is in Pi Mu Epsilon, Sigma Pi Sigma, AIEE and the Honor Court.

Feeling that because our college's growth unity and school spirit were suffering, Harold Howe, Franklin Petrask, and John Ryfun attended the March faculty meetings. Class convocations were suggested as desirable in promoting school spirit at the faculty meeting. The faculty has requested us to plan and institute convocation programs.

This summer the College of Applied Science will move to a new site, where General Electric had a five million dollar plant during the war. Unfortunately this will take us from the University campus; but greater opportuni-

ty for chapter activity will be possible. John Hanessian, a Chemmie, is pulling strings to establish a chapter house at this new site. Finding a chapter house in times like these will be a real accomplishment.

Both David Andrews and Franklin Petrask graduated CE's and they're back for their M.S. in Administrative Engineering. David's thesis is on "A Study of Plant Location Problems and Application of These to An Actual Industry". Dave is in Tau Beta Pi, Pi Mu Epsilon, Sigma Pi Sigma, ASCE, SAM, Honor Committee and Orange Key. Frank has been preparing recommendations for the National Constitution.

Jolly Eddie Burzynski, former Treasurer, is one of the proud daddies in Tau. His seven month old son tips the scales at a lusty twenty pounds! "Slicker" finds time for Pi Mu Epsilon and ASCE while coaching the Polish League of American Veterans in Softball. Trenton Laundry, Zeta Psi, and President of the Junior Class claims he is being pushed through college by his lovely wife, Bertha. Trent Junior, incidentally, challenges "Slicker" Junior in any ring at any time. Charles Kennedy, Jr., has a son that he says is going to be an ME, too.

Syracuse has proven to be a Mecca for many graduate Theta Taus. With this in mind Dave Andrews, "Woody" Fuller and Jim Blowers plan to organize a Theta Tau Alumni Club. Finally, we hope to have an alumni chapter in Syracuse.

Bob Carson of ASME, Pi Mu Epsilon, Sigma Pi Sigma, is President of the Honor System. "Pop" has been energetically making the Honor System a real success.

Dick Stitt, Laurence Alexander, Hal Howe, and Lothar Schmidt are in the AIEE. Hal started at Syracuse way back in 1937. He entered the Army in 1939 and served in the Second and Third Bomb Divisions of the mighty Eighth Air Force in England. He is an eager beaver in Sigma Pi Sigma, Honor Committee and IRE. Lothar, a member of Tau Beta Pi, Sigma Pi Sigma and Honor Committee, is President of Alpha Phi Omega, which he insists is not a Boy Scout troop for College boys. He used to pull an oar in Columbia before transferring to Syracuse.

"Bill Orange" is a campus tradition. Dressed in an orange suit and high stepping around the football field on 9 foot 6 inch stilts, he gains the awe of football fans between halves. "Bill" Orange is really Tau's inimitable Wayne Duerr.

Johnny Ryfun, who was our delegate to the convention and past Scribe, reports that

we have one swell bunch of brothers in the other chapters; he was a founder and the President of the Flying Club, a unique and very active organization on the campus. Brother Ryfun is one reason that our Theta Tau bowling team was undefeated last semester. He is lining up the Second Annual Engineers' Golf tournament, which he organized last year. Johnny is a Tau Beta Pi and in Pi Mu Epsilon. Vern Bell, a swell brother to have, is Vice President of the Flying Club. Vern is a member of Orange Key, Honor Committee, SAM, and Personnel Director for Campus Civil Service of Men's Student Government.

Two new initiates are smiling Michael Buhai and Nick Eassa; they're both active in SAM and Nick is Secretary of the Junior class. "Woody" Fuller, also SAM, hails from Louisville and is our past Vice Regent. "Woody" has done much for Tau's future, he is in the Graduate Commission and on the Staff of the Dean of Men. Bruce Allen of Lambda Chi Alpha and Tau Beta Pi, was a

hardworking Recording Secretary for Tau and has the same job for SAM.

One of the biggest men on the campus is David Bauer, past Regent. When Dave turned over the gavel to Stan, we gave him a standing vote of thanks. He has the very responsible position of Co-Chairman of the Chapel Board, plus membership on the Executive Committees of Syracuse-in-China and Campus Chest. Dave is in Orange Key, Pi Mu Epsilon, Sigma Pi Sigma and the Honor Court.

Jim Blowers, a Tau Beta Pi, Pi Mu Epsilon, Sigma Pi Sigma, and Honor Committee, was responsible for the grand Newsletter Tau has been sending to the alumni and other chapters. Jim is married, but has been vainly looking for an apartment in Syracuse.

Tau sends its brother chapters sincere wishes for continued success and prosperous growth.

Yours in H & T,
LOTHAR SCHMIDT
BILL KOPKA,
Corresponding Secretary



Tau Chapter

Good Grades a Habit With Upsilon



This school year started off with all members of Upsilon Chapter looking forward to a very successful and pleasing winter of college activities and we have not been disappointed in any way.

Our chapter again led all organized men's

groups on the campus in grade point when the lists were posted for the fall semester. This seems almost a habit for us and we are quite naturally proud of the accomplishment.

Another pre-war social activity, a formal dance, was reinstated this spring and its success was more than enough to warrant its continuance as an annual function.

Engineers' Day on the U. of A. campus is always properly celebrated and this year's in-

creased enrollment served to make it a bigger and better affair in which our chapter took a leading part. The Engineering Council, composed of sixteen students, directs the activity and thirteen of the sixteen members are Theta Taus.

Brother Schrader came to Fayetteville this spring for an informal visit which pleased us very much. His conversation gave us an even clearer picture of the unity of Theta Tau throughout the country.

The present chapter officers are: Robert Hester, Regent; G. S. Johnson, Vice Regent; Bert Thompson, Scribe; J. O. Grizzell, Treasurer; Paul Kormondy, Marshal; W. F. Russell, Corresponding Secretary; Joe Reynolds, Inner Guard; Bob Hay, Outer Guard, Ralph Stewart has succeeded Jackson Vineyard as house manager. Professors Stelzner and Spencer are chapter advisers.

Yours in H & T,
W. F. RUSSELL, Corres. Sec.

Phi Considering an Annex



Phi Chapter is again at its prewar peak. For the past two semesters we have been diligently striving to maintain a sound pledge program to get the house in shape and to place our men in key activities here at

Purdue. All of these goals have been aptly met and we are now looking forward to making Phi of Theta Tau better than the prewar prototype.

Our pledge program has proven entirely



Shambaugh, Benn, Pequignot and guests

satisfactory because of the tenacity of brother Bill Benn, who is our Rush Chairman. We not only have the house filled to capacity at the present time, but we also have six pledges who are waiting for the close of the current semester so that they may move into the house. Plans are now being discussed concerning the purchase of a prefabricated annex which would make Phi chapter larger.

At present we are looking forward to our spring activities. Our spring formal is to be held on March 29 in one of the better-off

campus spots, the Gridiron room in the Fowler Hotel. This is probably the most eagerly awaited event of the current semester, but we are all looking forward to the traditional lake outings and "beer busts" at Shaefer Lake, and to the Inter-Fraternity softball tournament as well. Phi chapter should be at the top in this tournament if enthusiasm and ability are prerequisites.

In order to further our engineering interests, we are inaugurating a series of talks and discussions here in the chapter house. These talks will be featured at our regular Wednesday formal dinner, and will include talks by prominent Purdue professors. They will speak on topics such as "Engineering and Psychology," "The Future of the Engineering Profession," and "Engineering Adventures in China." Several professors have already been contacted; consequently these engineering talks will begin in the immediate future.

We are happy to announce that our new chapter adviser is Robert Burnett, who besides being a Phi alumnus, a Tau Beta Pi, and a Coffin award winner, is now a member of the faculty here at Purdue. Professor Springer, who was formerly the chapter adviser, is now taking an active part in the alumni association along with Professor Solberg.

The officers for the following semester are: Paul R. Hughes, Regent; George R. French, Vice Regent; Robert E. Shaw, Scribe; and Keith W. Benn, Treasurer.

Recent initiates include Robert Donovan, George Eckerly, Edward Hughes, John Rados, Robert Shaw, and Robert Stavenick.

Phi Chapter extends best wishes to other chapters in the brotherhood of Theta Tau.

Yours in H & T,
R. M. DAVIS, Corres. Sec.

Chi Pleased Over Eighteen Fold Membership Increase



Today, in looking over the record of Chi Chapter, I take a great deal of pleasure in reporting that from an active membership of only two men in the spring of 1945, the Chapter has grown to an

active membership of 37 at this date. With the coming initiation we should have well over 50 actives by summer.

The following nine men were initiated into Theta Tau at the end of last semester: James

R. Shull, George Manning, William Oliver, William Pierce, Richard Aldrich, Arne Midgard, John Rich, Fred Foyle, and Richard Barr.

Brother Sparks, Vice Regent, was elected by the members to represent them in the National Convention. He received mention as an outstanding member there.

This year we held our annual Chi Chapter "Stag Bridge Party" at Professor Borgquist's home. We had a grand time with the alumni participating and furnishing the prizes. The chocolate cakes made by the wives of the honorary members were really "de-lish."



Chi Chapter Actives

Activities of the Chapter have been greater than those planned in a broad outline last fall. Lately Theta Tau has sponsored St. Patrick's Day with members on most key positions of the Engineer's Council, and on every committee for the organization of the parade, picnic, baseball league play, and dance. The enthusiasm shown by Theta Tau members has been and is a great contributing factor in making the success that is confidently expected of the Engineer's and Miner's celebration of St. Patrick's Day, March 17.

With all meetings and luncheon "get-together's" well attended, interest in Theta Tau is shown to be far from its peak at Chi Chapter. The next few meetings will be devoted to the selection of two honorary members from the faculty, and to the selection and election of new initiates for the Easter

Formal Initiation.

This year we are losing the biggest group of chapter members ever experienced with the following twenty men graduating in May: Fred Sherman, William Price, William Sparks, Herbert Vail, Richard Brittain, Denham K. Holmes, Barrington Long, David Ross, Frank Culin, Sigmund Levin, Frank McGinley, William Kinney, Field Curry, Harold Knutson, Robert Masching, Thomas Ballantyne, Richard Aldrich, Fred Foyle, and George B. Manning.

Chapter officers are: Regent, Daniel Howe; Vice Regent, Robert Shull; Scribe, William Campbell; Treasurer, Steve Elchuck; Marshal, John Rich; Corresponding Secretary, E. B. King; and Professor E. S. Borgquist, Faculty Adviser.

Yours in H & T,

E. B. KING, Corres. Sec.

Psi on Normal Basis Again



It is with great pleasure that I find myself in a position to inform you we are again at normal status.

Recently Paul Maloy, Galion, Ohio; Robert Meehans, Long Island, New York and Frank Hitchcock, Kalispell, Montana, became active bringing the total active membership to forty. We have a bright outlook for next fall in that we have sixteen pledges to fill the open spaces left by the graduating seniors.

Our officers for the current season are Regent, William Joyce; Vice Regent, Robert Burns; Scribe, Clarence Wells; Treasurer, Harold Johnson; Outer Guard, Charles Grimes; Marshal, Koehler Stout; and Corresponding Secretary, William Hand.

Our commemoration of Founders' Day was a formal dinner-dance in the Silver Bow Room of the Finlen Hotel on November 15. On January 18 Theta Tau and Sigma Rho Fraternities joined hands in friendship by

jointly organizing and attending a formal dinner-dance at the Silver Bow Room of the Finlen Hotel. Faculty and students attended totaling fifty-four couples. Both occasions were huge successes.

One of a series of activities planned for the future was a smoker held on February 12 for the purpose of getting acquainted with some men we hope to pledge. Also the bridge players of the Chapter are organizing for competition with other organizations on the campus.

Brother Thor Johnson has informed us that he has transferred to the regular Navy working with the Naval Research Laboratory and can be reached by addressing Lt. Cdr. T. W. Johnson, USN, Naval Research Laboratory, Washington, 20, D. C.

In closing, we express our sincerest fraternal greetings to our alumni and all members of Theta Tau.

Yours in H & T,

WILLIAM HAND, Corres. Sec.

Gamma Beta Men Like Responsibility



In response to your letter of February 27 here is Gamma Beta's spring report.

We are fortunate to still have our adviser Deacon Norman B. Ames, who has recently returned from the service.

Our slate of officers is as follows: Regent, David C. Carlson; Vice Regent, George Pida; Scribe, Jack M. Lane; Treasurer, Merrill R. Brown; Asst. Treasurer, Daniel McBride; Corresponding Secretary, Richard E. Shaw.

The initiation, to be described later, brought our roster of active members up to a total of thirty-two.

Members of Theta Tau continue to prove themselves leaders on the campus. In key positions in other Engineering Societies we have John Slothower, President of Engineers Council; Earl Stephenson, Chairman of Student Chapter AIEE, and Barrett Kreisberg, Chairman of Student Chapter ASCE.

It seems to be natural for Theta Taus to assume responsibilities. This is especially notable among that large group of married men. Here's hoping that they will be future Theta Taus.

We have had a number of very interesting activities in the past few months. On October 19, 1946 we initiated Frank A. Howard as honorary member. A complete account of Brother Howard's accomplishments was given in a recent copy of the Gear. The initiation was followed by a gala banquet and dance.

In January the Chapter and about fifteen prospective pledges were guests at a fish and oyster fry held at the home of Deacon Ames. A rough and tumble football game served as appetizer with fireside singing and story telling for desert.

On Saturday, February 1, the National Capitol Alumni Association invited the Chapter to the beautiful Twin Oaks Estate in nearby Virginia. Frank B. Weathersbee was initiated in the Chapter. The rest of the evening was spent in general recreation including pool, table tennis, cards and refreshments.

The annual Engineering School Ball, held March 8, was a huge success this year. Theta Tau was well represented among the five hundred merry makers.

Gamma Beta celebrated its birthday in a big way on Saturday, March 15. The following eight brothers were initiated: John H. Slothower, William E. Gaines, Julian M.

Schowkeir, John T. Dallas, Richard D. Craig, Elmer G. Sunday, Jr., Fremont H. Jewell, and Erwin J. Liljegren.

Following the initiation at Hotel Continental a banquet was served to over fifty members, including alumni and guests from other chapters. We were pleased to have with us the following brothers from Pi Chapter: William Markwood, Regent; Thomas Markwood, Jack Ticer, Thomas Patterson, James Iden, and James Calhoun. The banquet was followed by a very impressive and enjoyable ball.

For the first time since the war we are expecting to lose a sizable number of actives to the Alumni Association. Brother Richard L. Fenton graduated in February. In June he will be followed by: George Pida, Bernard Bernstein, Frank B. Weathersbee, Jr., Jack M. Lane, George P. Kalv, Felix Geissler, Alfred Barauck, and Barrett G. Kriesberg.

That's the way things are in Gamma Beta at the end of Spring, '46.

Yours in H & T,

R. E. SHAW, *Corres. Sec.*

National Capitol A. A. Holds Big Party

Dear Brother Howe:

The picture of activity of the alumni group in the National Capitol is regaining its prewar sparkle. The National Capitol Alumni Association met at Columbian House, George Washington University campus, on December 12, 1946, the main purpose being the election of officers. There were twenty-two alumni present and amongst them were many familiar faces whom we had not seen for a long time. Brother Robert Butterworth introduced Thor Johnson, of Psi Chapter, to the assemblage.

Results of the election are: President, Benedict Genua, Vice President, S. Power Warren—yes, that's right, its "Pi" Warren, from Gamma, whom we are pleased to number as one of our officers (all alumni should hear his discourse on the personal advantages and satisfaction to be derived from active participation in the activities of Theta Tau); Secretary, Ewing J. Ballou; Treasurer, Warren Crump; Executive Committeeman, Frank T. Mitchell, Jr. Brother Mitchell, on November 2, married petite and lovely former Miss Elizabeth Wells. Congratulations, Frank!

Saturday, February 1, N.C.A.A. held a stag party at Twin Oaks in Vienna, Virginia. Traditionally, this is a bang-up get-together of alumni, and the actives of Gamma Beta chapter and their pledges and prospectives. The scene of the party is, also traditionally, a barn that has been excellently outfitted as a recreation room, completely with recessed bar in one corner, fireplace, billiard table, table tennis, and poker tables—the whole tastefully decorated in knotty pine. These facilities are graciously made available to us through the generosity of the brother of one of our mem-

bers, George Lohnes. Beer, frankfurters, and the usual salty appetizers were abundantly provided. Twenty-eight alumni and sixteen Gamma Beta actives were there and we were host to four pledges. The party afforded ample opportunity for alumni to renew old acquaintances among themselves and to meet the newer actives and the pledges. We were especially happy to welcome back a number of returned servicemen. Of these alumni we saw there were Ed Baker, William Ellenberger, Carl Estabrook, Lou Naecker, Bert Randall, Guy Watson, and Harry Otis Wright. There was goodly representation of veterans among the actives present also, for many have returned to resume their war-interrupted studies. One of the pledge guests carried away the succulent-looking ham that we raffled during the evening. Julius Ritter was observed, with various others, bouncing the galloping dominoes off the south baseboard, much to his chagrin, we later learned. This reporter noticed only one thing lacking at the party—no one seemed disposed to organize the familiar quasi-inebriate quartette. Such a deficiency is worthy of our more gifted brothers at future parties of this sort.

Our delegate to the Louisville Convention returned to us as Grand Vice Regent. We are happy and proud of "Deacon" Ames and grateful to the Convention for its choice. Congratulations, "Deacon"! Those of us who know Brother Ames personally—know his wisdom, ideals, energy, good common sense, and devotion to Theta Tau—cannot refrain from congratulating the fraternity also.

Yours in H & T,

EWING J. BALLOU, *Sec.*

Chicago A. A. Gets Going Again

4505 W. Grand Ave.
Chicago 39, Ill.

Dear Brother Howe:

I hope we are not too late to meet the dead-

line you have set for the spring issue of the GEAR. The Chicago Alumni are in the process of reactivating themselves and as we become more organized we undoubtedly will be

more prompt.

Our first active meeting since 1942 was held December 2, 1946, at the Sherman Hotel, at which time the following officers were elected for 1947: President, Graydon W. Trout, Sigma '29; Vice President, Daniel V. O'Keffe, Alpha '38; Secretary and Treasurer, Robert R. Davis, Omega '39; and Directors, R. A. Hastings, Omicron '23; Nick Trbovich, Phi '37, and Everett Duckett, Omicron '33.

Since that time we have had our second meeting, also at the Sherman, on February 10. Brother M. R. Chandler kept sixteen of us entertained with a talk on a war unit of the Western Electric Company which manufactured crystalline filter electron tubes. Our President, Brother Trout, also read a report on the National Convention, held at Louisville, Kentucky.

We have tentative plans to hold our next meeting in April at which time we will visit

Northwestern University's new Engineering Building under the guidance of Brother J. O. Osterberg. In order to build our membership up as large as possible and thus have more and more active and interesting meetings, we wish you would place in a conspicuous spot in the GEAR a special plea for all Alumni in the Chicago area who do not believe their names are on our list, to send me a post card to the above address.

Before closing I wish to pay special tribute to Brother J. B. Finch whom I have succeeded as Secretary-Treasurer. He had held this post for approximately eight years, doing a fine job of holding together and keeping posted, a constantly changing list of Brother Alumni. It is through his good efforts that we have been able to become active in such a short time after the preceding confusing war years.

Yours in H & T,

ROBERT R. DAVIS, Sec.

Kansas City Alumni Association Having Vigorous Development

Dear Brother Howe:

The Kansas City Alumni Association, which has been inactive since the beginning of the war, jumped back into full activity as evidenced by a fine turnout at a meeting called at the home of Brother Karl Englund on December 11, 1946. Thirty notices were mailed to all the known Theta Taus in the Kansas City area. Of this number twenty-five were present.

Brother Karl Englund who was president of the association prior to the war, presided. An election was held which named Brother Ashford M. Galbreath, Zeta '31, as President and Brother Marvin S. Hensley, Zeta '30, as Secretary-Treasurer.

It was decided that the Kansas City Alumni Association should plan to have four meetings a year and should adopt as its objective to assist in promoting interest of the nearby chapter at the University of Kansas and to unify all alumni in the Kansas City area into a functioning organization.

Brother Ralph W. Nusser was selected as the official delegate of the alumni association to the Annual Fraternity meeting to be held at Louisville.

The association decided to have a social event for February at which the wives of the brothers could attend. Brother Alex Kennedy, Zeta '25, offered to head up this committee and proposed a dinner dance at the Indian Hills Country Club. Notices were mailed to

all alumni and to Zeta Chapter for the event February 18, 1947.

The dinner dance was held on the appointed night and was a startling and pleasant success. Fifty-three reservations were made and fifty-six actually attended. There was a fine fellowship period prior to the dinner where all got acquainted. A fine buffet dinner was served followed by a bingo game and dancing. Everyone had a wonderful time and expressed his desire for another such event. Brothers from Alpha, Beta, Iota, and Zeta attended. Brother Robert L. Brothers, Regent of Zeta, and Brother Robert G. Kunkle, Scribe, represented the active chapter.

Any alumni of Theta Tau residing in Kansas City who did not learn of our activities are requested to get in touch with the secretary of the Kansas City Alumni Association.

Since our first meeting our mailing list has grown from thirty to fifty, which is primarily the result of the dinner-dance meeting. Members exchanged addresses and furnished the secretary with quite a few names and addresses of brothers of other chapters. With a much larger list, we look forward to a bigger meeting in the spring. Active chapters have been requested to notify the Kansas City Alumni Association of any members in the Kansas City area, so that they can be tied into the association.

Yours in H & T,

MARVIN S. HENSLEY, Sec.-Treas.

S.W.A.A Contributing to Memorial

Dear Brother Howe:

I wish to report the activities of the South-western Alumni Association during the past year.

Our present officers are Arthur Davis, President, and myself, secretary and Treasurer. My address is the University of Arizona, Tucson.

We have had many alumni return from their service with the armed forces and are quite proud of the records they have established. In order to keep in better contact with our alumni, we are having prepared by the student chapter a card index of all the former members of Chi Chapter. We hope to obtain the present addresses of all these members so

that we can keep them better informed of the local activities of the fraternity.

As a memorial to the members of Theta Tau and Tau Beta Pi who gave their lives in World War II, the alumni of these two fraternities are designating that their donations to the Memorial Union Building to be built on the campus of the University of Arizona be used to dedicate one of the rooms in honor of these men.

Our association holds an annual meeting following the Founders' Day Dinner. At this time we elect officers and transact the business of the year.

Yours in H & T,

L. J. BOOHER, Secretary

Central Alumni Association to Publish a Directory

Dear Brother Howe:

The Central Alumni Association is now engaged in establishing contact with all the alumni of Sigma Chapter. We have had very good results to date and intend to publish a complete directory in the near future. Any Sigma alumnus who has not sent in an address card is requested to do so.

After being dormant for several years due to the war, the Alumni Association now has 45 paid up members and we are having an attendance of from 12 to 15 at our monthly

meetings.

In conjunction with the active chapter we are sponsoring a spring dance to be held in May. Any of the alumni living in the vicinity are cordially invited to attend.

The active chapter, Sigma, is having a rather difficult time but with the help of the alumni, who are rallying from coast to coast, we hope to have the chapter on a sound foundation in the near future.

Yours in H & T,

JAMES J. VISINTINE, Sec.-Treas.

Cleveland Association to Elect Officers

Dear Brother Howe:

There is little to report on activities of the Cleveland Alumni Association at this time. Do not infer that the Association has lapsed into a dormant state. Much to the contrary; for the Alumni that one meets daily in these parts talk and think Fraternity. As secretary I have the opportunity to record the pulse action for I am continually receiving phone calls and mail requesting me to place new names on the roster and receiving suggestions of all kinds.

The Cleveland Alumni Association since

revitalization has been functioning with temporary officers and it was agreed at the last Founders' Day meeting that a more permanent organization would be proposed. A Spring Dinner meeting is being planned some time in April at which time it is hoped these new organization plans can be laid before the membership. We regret that they are not as yet ready for publication in your next issue but I shall keep you informed of the program.

Yours in H & T,

GUSTAV KODET, Sec.

Cleveland A. A. Gives Good Report

Dear Brother Howe:

It may be of some interest to the various Theta Tau Alumni Associations scattered over the United States to know what we are doing here in Cleveland. A brief resume

of its activities is here outlined.

First of all, I wish to state that we enjoyed a most successful 42nd annual Founders' Day gathering on October 15. Through the efforts of Brother Leslie Reardon, Pro-

viser, we were able to obtain the facilities of Phi Kappa Tau chapter house. Fifty Theta Tau men, evenly divided between actives and alumni sat down to dinner and in spite of food restrictions (this was several days before Mr. Truman's talk on lifting O.P.A. restrictions on meats) we were served an excellent dinner which contributed materially toward the success of the evening. We had as our guest of honor Grand Regent, Russell G. Glass, who spoke on Theta Tau activities and his experiences as Grand Regent for the past eight years. The active chapter members excused themselves at 9:00 p.m. for they had studies to do and school the following day but the alumni remained for an informal discussion on alumni association activities elsewhere. It was a very enjoyable evening and through Brother Glass a great many valuable suggestions were obtained for making the Cleveland Association a bigger and more valuable organization.

The Cleveland Alumni Association has functioned to some degree ever since the founding of Delta Chapter. I became a member of Delta Chapter in 1915 and at that time the Alumni Association, although small in number, was a very active organization, meeting regularly every month and supporting all active chapter activities. World War I disrupted this for several years and then in the late 20's it was again reactivated to some extent, but I had lost contact with the Fraternity during this time. Through the efforts Brother Leslie Reardon, the 40th Founders' Day gathering was prompted and on October 16, 1944 attended by some 90 alumni and actives. This dinner meeting was held in the quarters of the Cleveland Engineering Society and we had as our guest speaker on that occasion, Dr. Wm. E. Wickenden, President of Case School. It was he who had urged that the Cleveland Alumni Association be continued and made a more active unit of the Fraternity. Therefore, temporary officers were appointed until permanent ones could be elected. But as usual temporary appointments always result in very permanent ones and as a result I am still secretary. Other appointments made at that time and still functioning are: Bruce Baty, President, Leslie Reardon, Vice President, and D. Horseburg, Treasurer.

Considerable work and time has been spent on compiling a roster of Theta Tau men in

this area. With the aid of the Case School Alumni Directory and the names of the members of Delta Chapter, I have been able to locate some 200 men. Names of alumni from other chapters were checked in local phone books, calls made to verify the correctness, with the result that some 50 additional names were placed on the roster. We would like to have all Theta Tau men in this area listed and any help the Gear can give in this respect will be greatly appreciated.

Regular dinner meetings have been held three times each year and an interesting program was arranged for each meeting, ranging from motion pictures to initiation of one candidate. That was indeed interesting to most of us old timers. Our average attendance has been 60 to 70, although we had to limit our attendance to 50 this last Founders' Day due to limited facilities at Phi Kappa Tau house. Of the 250 men on our mailing list more than one-half have attended one or more meetings. Some have attended all. Having reactivated the Association, the Executive Committee will meet in the next few weeks to outline a definite program or objective in order that we may create an incentive for larger attendance.

Dues have been collected only by voluntary contributions, of one or two dollars. Although we have not curtailed any activities due to finances, we have agreed that some definite amount should be set as yearly dues. With definite financed income we believe a more extensive student incentive program can then be promoted by the alumni and also proper representation can be made at the regular Theta Tau Conventions. Until such a time as this program can be instituted we will gladly accept any contributions from alumni in this area.

I believe I have covered the program of the Cleveland Alumni Association in a brief way. I shall keep you informed of our activities in order that they may be published through your medium, The Gear. In the meantime, I shall be happy to hear from any Theta Tau alumnus in this area. They may contact me either through you or directly, either at my home or office. With best Fraternal wishes, I am

Yours in H & T,

GUSTAV KOBEY, Sec.

Intermountain A. A. Has Peak Year

Dear Brother Howe:

The paid up membership of the Inter-

mountain Alumni Association of Theta Tau for the year 1946 was 202. This is the first

time our membership has passed the 200 mark. This makes the Intermountain Alumni Association the largest engineering organization in this area. Our nearest rival is the Utah Society of Professional Engineers with a membership of approximately 125. During 1947 we hope to build up our active membership to 225 or more.

With only two days notice Lambda Chapter sponsored a banquet in honor of our Grand

Scribe, Erich J. Schrader, and our new Grand Outer Guard, George W. Carter. The banquet was held in the Union Building at the University of Utah. Twenty-three actives and 41 alumni or a total of 64 Theta Taus enjoyed the meeting. Erich Schrader and George Carter reported on the National Convention which was held at Louisville, Kentucky.

Yours in H & T,

C. MILTON ANDERSON, Sec.

Northwest Alumni Club Emphasizes Sociability

During the past year we have held two meetings. The first was held June 6 at the Finlen Hotel preceeding the annual Montana School of Mines Alumni dinner. The meeting was in the form of a cocktail party and was well attended.

Our second meeting was an informal gathering held at the home of Dr. E. S. Perry, including the ladies. This type of meeting proved successful. It afforded an excellent opportunity to renew old friendships.

Our present officers are: President, Robert Lawson; Vice President, Rayworth Howe; Secretary-Treasurer, Dave Piper, and Executive Officers, George Hansen, Dr. E. S. Perry, Frank Trask, Jr., and Thomas Bonnet.

Frank Trask has recently accepted a position in Chile and now resides there with his family.

Yours in H & T,

DAVE PIPER, Sec.

Alumni Notes

ALPHA

COE, EDWARD H., '19, Col., U. S. Army, of 2627 S. Grant Street, Arlington, Virginia, received the Legion of Merit "for exceptionally meritorious service in Europe from November 1943, to July, 1945. At the

present time he is chief of the supply division and acting director of military supply and procurement, Office of the Chief of Engineers, Washington.

BETA

ANGST, ROBERT A., JR., '33, sends in his address as 2631 E. Second Street, Duluth, Minn.

SIEWERT, NORMAN R., '36, asks that mail be sent to 105 Oneta Road, Rochester 5, New York.

GAMMA

MCGLONE, EDWARD S., '23, one of the youngest high executives in the metal-mining industry, is vice president in charge of Western operations for Anaconda Copper Co.

McCLURE, FRANK LEE, '32, has the following address: Mr. F. L. McClure, Asst. Man-

ager, Export Division, E. I. du Pont de Nemours & Co., Inc., Empire State Building, New York City, New York.

HARRISON, ROBERT W., '33, joined the Standard Oil Co. of Texas as chief petroleum engineer on January 1, 1947. His new address is P. O. Box 1249, Houston 1, Texas.

DELTA

KLIPIERT, D. S., '31, should be addressed at 2019 32nd Street, N.W., Canton 3, Ohio.

KLEINBERG, LESTER R., '32, now resides at 513 N. La Cienega Blvd., Los Angeles, 36, California.

BACKLOND, MAUNO, '41, sends in his address

as P. O. Box 271, Chagrin Falls, Ohio. He has one son, M. Frederick, born in July, 1945.

BECKWITH, ROBERT W., '41, should be addressed at 235 Shaver Avenue, North Syracuse, New York.

EPSILON

BOWIE, ALLEN P., '32, is now with the General Petroleum Corp. as petroleum engineer. His address is 317 Ninth, Bakersfield, California.

TWENHOFEL, WILLIAM S., '41, informs us that his address is now 710 Oneida Place, Madison 5, Wisconsin.

ZETA

KINDSVATER, EMIL, '23, is manager of the newly formed chemical engineering department of Phillips Petroleum Co. in Bartlesville, Oklahoma. The Kindsvaters live at 1341 Keeler Avenue, Bartlesville.

MAGRUDER, S. H., '33, asks that his mail be sent in care of General Electric Co., 1387 Main Street, Springfield, Massachusetts.

SPAHR, CHARLES E., '34, returned from India in September 1945 and rejoined the Standard Oil Co. of Ohio, and is serving as an assistant to the Vice President in the Trans-

portation Department. Address: 1850 Forest Hills, East Cleveland, Ohio.

CHRISTIANSON, LLOYD F., '35, is now serving as head of Electronic Associations, Inc. The home address of the Christiansons is 639 Norwood Avenue, Long Branch, New Jersey.

McKIM, R. D., '35, has moved to 8715 High Drive, Kansas City, Missouri.

KOELZER, VICTOR A., '37, is with the Bureau of Reclamation, Interior Bldg., Washington 8, D. C.

THETA

SCHUBERT, ROBERT W., '43, resides at 511 West 235th Street, Riverdale, New York 63, New York.

FRIITS, HARRY W., '45, gives his mailing address as 420 W. 121st Street, New York 27, New York.

IOTA

LOGAN, EDWIN W., '37, is now living at 7 Granvue Drive, Belleville, Illinois.

McCLOSKEY, JOHN R., '38, wants his mail sent to 610 W. Cheny Street, Carbondale, Illinois.

SHORT, JOHN A., '38, lives at 1233 Elmerine, Jefferson City, Missouri.

OBERBECK, WILLIAM F., '39, informs us that his mail goes to 27 Orchard Lane, Kirkwood 22, Missouri.

HUMPHREY, JOHN R., '41, has moved to Michigan, his address being P. O. Box 31, Negaunee, Michigan.

KAPPA

BETTS, WILBUR W., '35, is chief engineer for the Kirster Pipe Co. in Seattle. His address is 1317 44th Street, S.W., Seattle,

Washington. Washington is a wonderful state according to Brother Betts.

LAMBDA

VARLEY, C. RAY, '43, should be addressed at

P. O. Box 277, Hayward, California.

MU

HAMIL, JOHN C., '42, informs us that his address is now Broadmoor, Route No. 7, Jackson, Mississippi.

SCHACHER, DANIEL L., '45, sends in a new address. It's 600 West 111 street New York 25, New York.

NU

CHEESEMAN, EVANS W., '36, asks that his mail be sent to 1555 Rosewood, Cleveland 7, Ohio.

JETTER, LAWRENCE K., '36, has moved to 102 Kingfisher Lane, Oak Ridge, Tennessee.

EDWARDS, DAVID G., '39, has a change of address from Tonowanda, New York to California Research Corporation, Richmond, California.

OMICRON

ASHTON, EDWARD L., '25, is on the Board of Directors of the Iowa Engineering Society. Ned is spending his spare time building a house in the north part of town on the Iowa River.

STANLEY, C. MAX, '26, was elected Vice President of the Iowa Engineering Society in Des Moines.

MULLINEX, CHARLES D., '30, is with the Howard Green Consulting Engineers in Cedar Rapids and lives at 117 12th St., Cedar Rapids.

KEHE, LUVERN, '31, returned from the ser-

vice and has set up his own contracting company with headquarters in Waverly, Iowa.

MAY, CARL H., '36, joined the Coast Guard following graduation and served throughout the war. He plans to continue in the service as an engineer officer.

POSTELWAIT, JOHN C., '47, graduated in February and is now working for the Austin Engineering Co. He lives at Gibby's Trailer Haven, his address being P. O. Box 951, Peoria, Illinois.

PI

NEWCOMB, JOHN LLOYD, Honorary, has announced his intention of retiring just as soon as a successor can be appointed by the

Board of Visitors. Brother Newcomb was initiated as an Honorary member of Pi Chapter in 1926.

QUARLES, LAWRENCE R., '29, who has just been reappointed Chapter Adviser to Pi Chapter has been appointed acting Dean of the Department of Engineering until a successor to Dean Rodman can be appointed.

Dean Rodman passed away on December 31, 1946.

TALBOT, STUART, '43, asks that his mail be sent to 608 West 107th St., Chicago 28, Illinois.

RHO

HODGES, THOMAS L., '32, has changed his address from 3803 Calvert St., N.W., Washington, D. C. to P. O. Box 1108, Baton Rouge, Louisiana.

PETROFF, BORIS B., '33, wants his mail sent to 4535 Kingle Street, N.W., Washington 16, D. C.

BRIGGS, THOMAS L., JR., '43, who is employed with Allis Chalmers in the Steam Turbine Department, lives at 2471 South 68th Street, West Allis, Wisconsin.

STOCKARD, H. J., JR., '43, notifies us that he

is now living at 12½ S. Boylan Avenue, Raleigh, North Carolina.

GOODRUM, WILLIAM J., '44, gets his mail at 2200 Lumber Street, Chicago 16, Illinois. He is connected with the Spencer Kellogg and Sons, Inc., plant in Chicago, and writes that he is enjoying the work. He supervises quality control in the manufacturing and refining of drying and semi-drying of vegetable oils and has an occasional design project to add variety.

SIGMA

DUMBAULD, GEORGE L., '34, resides at 1103 Bomar, Houston, 6, Texas.

BOEBINGER, ELBERT J., '38, gives his address

as follows: 5767 Cheviot Road, Cincinnati, 11, Ohio.

TAU

JERRY, JAMES J., '34, has come through with a new address at P. O. Box 4116, Charlotte,

North Carolina.

UPSILON

HIRSHORN, B. J. LEON, '33, sends in his address as 1125 Fulton Street, Fort Wayne 2, Indiana.

SMITH, NORMAN L., '41, announces the ar-

rival of a son, Michael Alan, on March 5, 1947. The Smiths live at 147 Caldicott Road, Schenectady, New York.

PHI

KRAMER, CHARLES E., '40, informs us that his address is now 1402 Sinton Avenue, La-

fayette, Indiana.

CHI

RAYMOND, HENRY S., '37, has come through with a new address. It's now P. O. Box 36, Goodyear, Arizona.

BORGQUIST, NEIL E., '39, gets his mail at Box 792, Fresno, California.

GATLIN, CLATE A., '41, gives his home address as 96 Van Buren Street, Apt. No. 1,

Peoria, Illinois. Brother Gatlin spends most of his time traveling for the Caterpillar Tractor Co. as a field research engineer.

FENN, FRED N., '45, was recently discharged from the Navy and can be addressed at So. California Edison, Big Creek, California.

PSI

HAMILTON, FRANK A., '41, wants his GEARs sent to him at 1010 Wolsely Avenue, Bell Rose Apts., Winnipeg, Manitoba, Canada.

JOHNSON, THOR, W., '41, should be addressed

as follows: Lt. Cdr. Thor W. Johnson, USN, Naval Research Laboratory, Washington 20, D. C.

MULCAHY, B. A., '36, informs us that his mail should be sent to 13202 Bennington Avenue, Cleveland 11, Ohio.

STANLEY, IRA L., '39, is with the U. S. Bureau of Reclamation, P. O. Box 287, Ken-

mare, North Dakota.

INGWERSEN, GORDON R., '44, lives at 221 Charles Street, Westfield, New Jersey. He is employed by the Aluminum Company of America.

GAMMA BETA

LAWTON, WARREN L., '34, was transferred from the Public Roads Administration to the Civil Aeronautical C.A.A. Experimental

Station at the Municipal Airport in Indianapolis, Indiana. His address is 2510 S. Collier St., Indianapolis.

"What is the longest word in the English language?" asks a quiz column.

Unmistakably it is the one following the statement "And now a word from our sponsor."

Skidding is the action
When the friction is a fraction
Of the vertical reaction
Which doesn't result in traction

Housewife (to tramp who asked for a handout): "Did you see that block of wood out in the yard?"

Tramp: "No, ma'am."

Housewife: "Oh, yes you did. I saw you see it."

Tramp: "Well, maybe you saw me see it, but you ain't gonna see me saw it."

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